

**U.S. Environmental Protection Agency
Oregon Department of Agriculture and Oregon OSHA**

**End-of-Year Review Report for the
Fiscal Year 2014
Pesticide Cooperative Agreements**

February 17, 2015

Summary

This end-of-year evaluation report reviews the pesticide programs for two Oregon state agencies: the Oregon Department of Agriculture (ODA) and the Oregon Occupational Safety and Health Administration (OSHA). This summary provides an overview of major efforts, accomplishments, and suggestions for improvement.

In Fiscal Year (FY) 2014, ODA implemented an excellent enforcement program. ODA continued to improve its program by implementing new procedures to address EPA's recommendations in the past few years. ODA greatly improved the time it took to write inspection reports, issue enforcement actions, and analyze laboratory samples. ODA exceeded the number of inspections that it projected at the beginning of the year. Moreover, ODA analyzed 236 more environmental samples than originally projected. EPA found that the inspections conducted were thorough, and the enforcement actions issued were consistent with the enforcement response policy.

Oregon OSHA continued to implement an excellent Worker Protection Standard (WPS) enforcement program. The compliance officers were well-trained to do their work, and they conducted detailed and thorough inspections. Checklists were used during interviews with handlers and workers, and Letters of Corrective Action were used to ensure that violators came back into compliance. The enforcement actions issued were timely and consistent with the enforcement response policy.

ODA implemented an excellent certification and training program that addressed the important issues and the needs of applicators in Oregon. In FY 2014, 4,206 private applicators and 5,130 commercial applicators were certified and licensed in Oregon. To address the high profile bee kill cases and the adoption of temporary state rules to protect bees, ODA did an outstanding job on its education and outreach efforts: ODA proactively developed brochures and training modules related to pollinator protection, presented at numerous classes and workshops, and sent advisory letters and made automated calls to licensed applicators and stakeholders. ODA also updated its Insecticide and Fungicide examinations to add information regarding pollinator protection. To protect workers from potential adverse effects of zinc phosphide, ODA worked closely with Oregon OSHA and issued a FIFRA Section 24(c) registration that mandates specific ODA training prior to product use. In FY 2014, ODA actively worked to reinstate the reciprocal licensing with the Idaho State Department of Agriculture, to recognize most of Idaho's certification and licensing types and categories.

Oregon OSHA made national impact in FY 2014. Thanks to Oregon OSHA's efforts, the respirator language review section in EPA's Label Review Manual was updated. These efforts will help ensure pesticide labels include language that will conform to current respirator standards approved by the National Institute for Occupational Safety and Health. Oregon OSHA also developed two Hazard Alerts related to fumigation management plans for aluminum phosphide and updated its personal protective equipment brochure. In FY 2014, Oregon OSHA participated in 23 agricultural classes and workshops for growers and workers.

During FY 2014, ODA continued to work in cooperation with State and local agencies regarding pesticide management to protect water quality. In partnership with the Water Quality Pesticide Management Team, ODA evaluated more than 600 surface water samples collected from Pesticide Stewardship Partnerships project areas, identified Pesticides of Interest and Pesticides of Concern, and managed Pesticides of Concern. ODA also conducted outreach and education related to pesticides and water quality at training courses and at grower association and applicator meetings.

ODA conducted many activities related to the protection of endangered and threatened species. ODA provided outreach and education related to endangered species protection to pesticide applicators and interested parties through newsletters and at training classes. ODA worked with U.S. Fish and Wildlife Service and Oregon Department of Fish and Wildlife to develop emergency exemptions and special local needs restrictions to protect threatened and endangered species.

I. BACKGROUND

A. General

1. History

In Oregon, EPA Region 10 has cooperative agreements with two state agencies: ODA and Oregon OSHA. ODA is the state lead agency for pesticide use enforcement, certification and training of pesticide applicators, the water quality protection program, and the endangered species program. Oregon OSHA is the primary state agency for enforcing the employer-employee aspects of WPS.

Funding of the cooperative agreement with ODA is authorized by FIFRA Section 23. For the FY 2014 cooperative agreement, EPA provided ODA with \$475,023 in federal funds. In FY 2014, EPA did not provide Oregon OSHA with any federal funds. Oregon OSHA receives federal funding directly from the U.S. Department of Labor, Occupational Safety and Health Administration. Thus, Oregon OSHA has an un-funded cooperative agreement with EPA Region 10.

In FY 1994, Oregon OSHA formally adopted, by reference, EPA's WPS for Agricultural Pesticides, 40 C.F.R. Part 170, into its administrative rules at Oregon Administrative Rules, Chapter 437, Division 81 - Agricultural Operations and Farming. As a result of Oregon OSHA's rule adoption, the enforcement of EPA's WPS is conducted by Oregon OSHA. In FY 2001, EPA Region 10 and Oregon OSHA entered into an unfunded cooperative agreement. This cooperative agreement between EPA and Oregon OSHA creates a direct, on-going working relationship between EPA and Oregon OSHA, with respect to the employer-employee aspect of WPS. Moreover, during FY 2001, ODA and Oregon OSHA finalized an interagency agreement that reflected the continuous coordination and implementation of the WPS activities in Oregon.

2. Project Period

For this report, ODA's activities from July 1, 2013, to June 30, 2014 (ODA's FY 2014) were evaluated. The project period for the cooperative agreement with ODA was originally for one year, from July 1, 2013, to June 30, 2014. However, the cooperative agreement was extended for two more years, until June 30, 2016, because ODA did not complete one component of the workplan: the production of a WPS Forestry Video. EPA approved the extension to allow ODA more time to include the WPS revisions into the WPS Forestry Video. EPA is currently working on the WPS revisions.

The project period for the Oregon OSHA cooperative agreement was from October 1, 2013, to September 30, 2014, which was Oregon OSHA's FY 2014.

3. Review Methods and Dates

For the ODA, the end-of-year review for FY2014 was conducted via a telephone call on

October 27, 2014.

For Oregon OSHA, the end-of-year review for FY 2014 was conducted via a telephone call on January 6, 2015.

4. Review Participants

The EPA participants for the ODA end-of-year review were Chad Schulze, Pesticides Enforcement Lead; Derrick Terada, Coordinator of Certification and Training and Worker Safety Programs; Gabriela Carvalho, Coordinator of Pesticides and Water Quality Program; and Linda Liu, Oregon Project Officer and Coordinator of Pesticides and Endangered Species Protection Program.

The ODA participants were Ray Jaendl, Director of Natural Resources Policy Area; Dale Mitchell, Manager of Pesticides Program; Rose Kachadoorian, Pesticides Regulatory Leader; Mike Odenthal, Lead Investigator; Sunny Jones, Compliance Specialist; Steve Riley, Pesticides Water Issues Specialist; and Linda White, Pesticides Program Certification and Training Specialist.

The EPA participants for the Oregon OSHA end-of-year review were Derrick Terada and Linda Liu. The Oregon OSHA participant during the review was Garnet Cooke, Oregon OSHA's Pesticide Coordinator.

B. Scope of Reviews

This report summarizes the results of the FY 2014 end-of-year review for two cooperative agreements: (1) between EPA and ODA; and (2) between EPA and the Oregon OSHA. Program accomplishments, effectiveness, problem areas, suggestions for improvement, and any resolutions to problems are described in the sections below.

II. FINANCIALS

A. Budget Analysis

The following table summarizes funding and expenditures for the cooperative agreement with ODA:

Work Plan Component	EPA Funding	State Funding	Total Funding	Unliquidated obligation
Enforcement	\$270,680	\$1,515,195	\$1,785,875	\$0
Certification	\$112,500	\$341,929	\$454,429	\$0
Programs*	\$63,500	\$39,976	\$103,476	\$0
WPS Forestry Video**	\$28,343	0	\$28,343	\$28,343
TOTAL	\$475,023	\$1,897,100	\$2,372,123	\$28,343

*Programs included Water Quality and Endangered Species Protection activities.

**ODA received an extension, until June 30, 2016, to produce a WPS Forestry Video. ODA will include WPS revisions into this WPS Forestry Video.

III. COMPLIANCE AND ENFORCEMENT

A. Reports from ODA

1. Pesticide Enforcement Cooperative Agreement Accomplishment Reports, EPA Form 5700-33H, is attached as Appendix A.
2. Pesticide Container/Containment Inspection and Enforcement Accomplishment Report, EPA Containment/Containment Form 5700-33H, is attached as Appendix B.
3. ODA's enforcement summary for FY 2014 is attached as Appendix C.
4. Summary of inspections and enforcement actions. The following tables summarize the inspection and enforcement activities that ODA reported to EPA.

Inspections and Samples Projected and Completed by ODA. This table compares inspection and sample projections as stated in ODA's workplan and the actual accomplishments.

Inspection Type	Inspections Projected	Inspections Completed	Physical Samples Projected	Physical Samples Analyzed
Agricultural (Ag) Use Observations	8	15	0	12
WPS - operator/grower information exchange (OGIE)	0	1	0	0
Soil Fumigant Applications	2	3	0	0
Ag Use Follow-up	15	50	40	300
Non-Ag Use Observations	10	15	0	0
Non-Ag Use Follow-up	15	80	19	126
Experimental Use Permits	0	0	0	0
Producing Establishment	3	3	0	0
Container/Containment	2	2	0	0
Marketplace	5	55	0	0
Import	0	0	0	0
Export	0	0	0	0
Applicator Records	10	53	0	0
OGIE	0	10	0	0
Restricted Use Pesticide Dealer	10	28	0	0
TOTAL	76	299	59	438

ODA exceeded the total number of inspections that were projected at the beginning of the year (76). A total of 299 inspections were conducted by ODA in FY 2014 using both EPA and state funds. Although ODA committed to analyzing 59 samples in FY 2014, ODA used state funds and analyzed a total of 438 samples. EPA greatly appreciates ODA's increase in samples analyzed over the past four years. Figure 1 below shows the trend for samples analyzed.

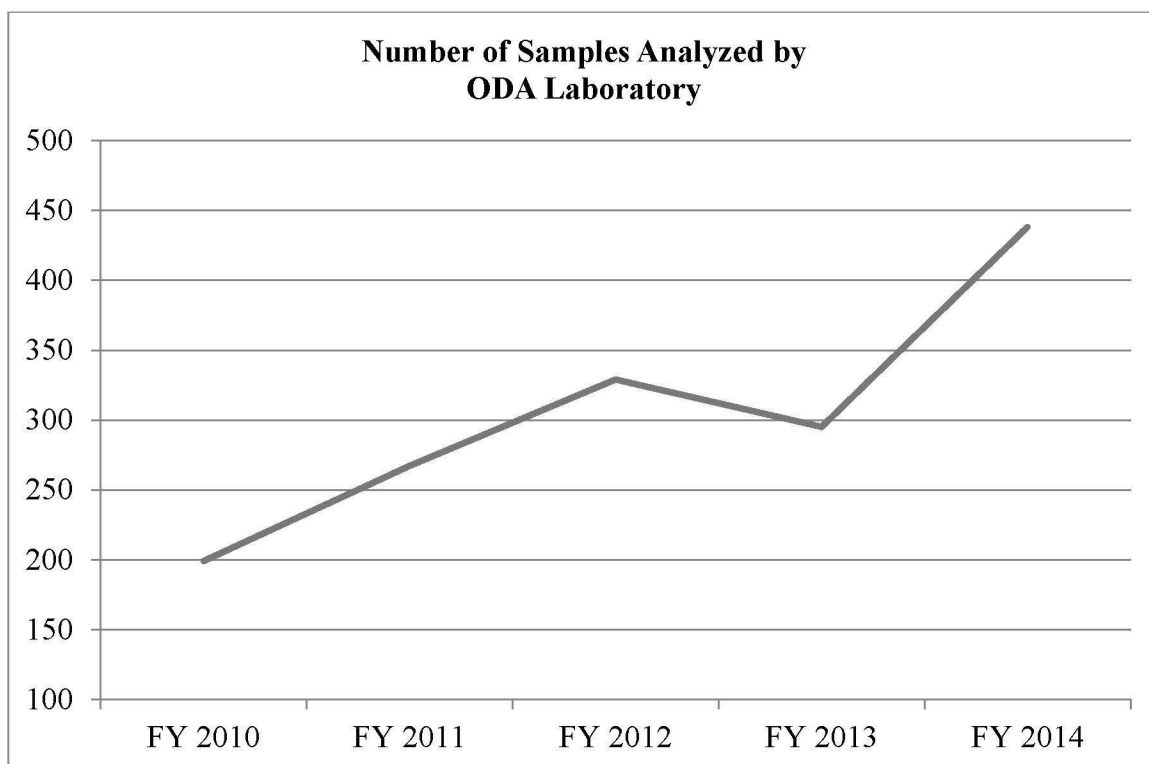


Figure 1

Enforcement Actions reported by the ODA in EPA Form 5700-33H

Inspection Type	Warnings Issued	Fine Assessed	Civil Complaints	License Actions	SSUROs	Other Actions*
Ag Use Observations	0	1	1	0	0	0
Ag Use Follow-up	18	15	15	0	0	2
Non-Ag Use Observations	2	0	0	0	0	0
Non-ag. Use Follow-up	28	22	22	0	0	0
Experimental Use	0	0	0	0	0	0
Producing Establishment	0	0	0	0	0	3
Market Place	5	0	0	0	15	24
Import	0	0	0	0	0	0
Export	0	0	0	0	0	0
Applicator Records	33	7	7	0	0	0
Restricted Use Pesticide Dealer	0	0	0	0	0	0
TOTAL	86	45	45	0	15	29

*Other Actions include administrative hearings conducted and cases forwarded to EPA for actions

B. Reports from Oregon OSHA

1. Pesticide Worker Protection Standard Inspection and Enforcement Accomplishment Report, EPA WPS Form 5700-33H, is attached as Appendix D.
2. Oregon OSHA Pesticide Emphasis Program Annual Report Federal Fiscal Year 2014 is attached as Appendix E.
3. Summary of inspections and enforcement actions. The following tables summarize the inspection and enforcement activities that Oregon OSHA reported to EPA.

WPS Inspections Completed by Oregon OSHA

Inspection Type	Inspections Completed
Agricultural Use Total	42
Tier I WPS	35
Tier II WPS	7
Agricultural For Cause Total	19
Tier I WPS	18
Tier II WPS	1
TOTAL	61

In FY 2014, Oregon OSHA exceeded the 60 inspections projected and conducted 61 inspections. Of the 61 inspections, 53 were Tier I and eight were Tier II inspections.

WPS Enforcement Actions Reported by Oregon OSHA

Inspection Type	Formal Actions (Citations) Issued	Cases which had Civil Penalties	Administrative Hearings	Criminal Action	Other Actions (informal advisory letters)
Agricultural Use Observations	9	9	0	0	25
Agricultural For Cause	6	6	0	0	4
TOTAL	15	15	0	0	29

C. Case File and Enforcement Action Evaluation for non-WPS Cases

1. ODA Case Review, Enforcement Action Evaluation, and Significant Cases

EPA Region 10 reviewed 20 randomly selected case files. The evaluation of the case files, the enforcement actions, and the significant cases' coordination are summarized in the table below.

#		Did ODA meet EPA's expectations?		Comment
		Yes	No	
1	Conduct thorough inspections	√		
2	Include good narrative reports in the case files	√		The narratives were well written and thorough.
3	Write narrative reports in a timely manner	√		95% of inspection reports were completed within 120 days of initiations of the inspections. The 120-day time frame is an unwritten goal set by ODA for inspection reports.
4	Present federal credentials at the start of Producer Establishment Inspections (PEIs) and for non-PEIs, follow state policies with regards to introducing themselves at the start of the inspections	√		<p>ODA conducted three PEIs that required inspectors to present their federal credentials. ODA forwarded these PEI case files to EPA Region 10 for review and further actions. A preliminary review of the case files show that they appear to be very thorough and complete.</p> <p>ODA developed a new procedure to ensure inspectors' identifications are presented at the start of non-PEIs. A few investigators did not document these acts in their inspection reports reviewed by EPA.</p> <p>EPA recommends that the act of introduction with identifications be consistently documented in inspection reports.</p>
5	For Dealer Record Inspections (DRIs), review receipts to ensure that only licensed individuals purchased Restricted Use Pesticides (RUPs)	√		
6	For DRIs or Market Place Inspections (MPIs), ensure that pesticides are labeled in accordance with laws	√		
7	For Applicator Records Inspections (ARIs), review application records	√		
8	For ARIs, check if the applicators were adequately licensed	√		
9	For Use Inspections, check if the applicators were adequately licensed	√		
10	For Use Inspections, gather adequate application records	√		

#		Did ODA meet EPA's expectations?		Comment
		Yes	No	
11	For Use Follow-up Inspections (UFs), respond to complaints in a timely manner	√		Response times to complaints were excellent.
12	Include in the case file the rationale for not responding to complaints in a timely manner	√		
13	During UFs, collect sufficient physical samples	√		ODA collected numerous samples during inspections. EPA greatly appreciates ODA's steady increase in samples collected over the past four years and recommends that ODA continue collecting this increased number of samples.
14	If physical samples were not collected during UFs, include the rationale in the case files	√		
15	Have adequate laboratory turn-around times	√		ODA's laboratory turn-around time was within 120 days in all but one case. ODA has significantly improved the laboratory's turn-around time.
16	Take adequate photographs	√		ODA inspectors took photographs in all but one inspection. This inspection was a routine MPI where no violations were identified and photographs were inconsequential. EPA recommends that ODA take photographs during all MPIs. ODA could take set up shots at the front of the buildings and some photographs that illustrate the focus of the inspections; e.g., pesticide products offered for sale.
17	For inspections, include adequate copies of the product labels in the appropriate case files	√		ODA inspectors included adequate copies of product labels in all but one case. EPA recommends that ODA strives to include product labels in all use cases. Photographs of the front panel and the appropriate use directions can suffice as a record of the label.
18	Include maps when appropriate	√		ODA inspectors included maps in all but two cases. EPA recommends that ODA strives to include maps in all case files involving use follow-up inspections.

#		Did ODA meet EPA's expectations?		Comment
		Yes	No	
19	Include adequate supporting documents	√		
20	Follow its enforcement response policy	√		ODA followed its enforcement response policy in the cases that EPA reviewed. In one case, ODA issued a Notice of Violation to an applicator for application without obtaining proper licenses, but ODA did not cite the applicator for using a pesticide in consistent with its label. EPA recommends that ODA look for opportunities to cite all pertinent violations of Oregon rules.
21	Issue timely enforcement actions	√		
22	Adequately coordinate significant cases with EPA	√		

2. State Recommendations

ODA provided two recommendations to EPA:

- a. ODA would like EPA HQ to review the data and reports submitted by State Lead Agencies and make necessary regulations or policy changes based on the information received; and
- b. ODA would like EPA HQ and EPA Region 10 to keep providing assistance to ODA when requested. ODA appreciated the assistance given by EPA Region 10 for the past year.

D. Compliance Priority – WPS

1. Oregon OSHA Case Review, Enforcement Action Evaluation, and Significant Cases

EPA Region10 reviewed nine WPS cases. The evaluation of the case files, the enforcement actions, and the significant cases' coordination are summarized in the table below:

#		Did Oregon OSHA meet EPA's expectations?		Comment
		Yes	No	
1	Conduct thorough inspections	√		
2	Include good narrative reports in the case files	√		
3	Write narrative reports in a timely manner	√		

#		Did Oregon OSHA meet EPA's expectations?		Comment
		Yes	No	
4	Present credentials at the beginning of inspections	√		
5	For the use follow-up inspections, respond to the complaints in a timely manner	√		
6	Include photographs in case files	√		
7	Include adequate copies of the product labels	√		
8	Include documentation that address central location, safety training, decontamination supplies, notice of application, posting of application, information exchange, and early entry requirements	√		
9	Address personal protective equipment, mixing and loading and application equipment, emergency assistance, and retaliation	√		
10	Include documentation of appropriate worker and handler interviews	√		
11	Issue enforcement actions in timely manner	√		
12	Follow enforcement response policy	√		
13	Address problem areas identified by violation trends	√		
14	Adequately coordinate significant cases with EPA	√		

WPS Compliance Analysis

During the inspections conducted in FY 2014, Oregon OSHA identified 124 WPS violations. Of the 124 violations, 52 were related to central posting, 26 were related to training, 24 were related to decontamination, 19 were related to personal protective equipment, two were related to notice of application, and one was related to mixing and loading.

2. State Feedback

None.

E. Inspection and Enforcement Support

1. Training at ODA

To adequately investigate violations of state pesticide laws and regulations, a state needs to ensure that state inspection and enforcement personnel are trained in such areas as health and safety, violation discovery, obtaining consent, sampling procedures, case

development procedures, and maintenance of case files. A continuing education program is also crucial so that the staff can keep abreast of legal developments and technological advances. ODA has four investigators with EPA inspector credentials. These investigators obtain their eight-hour health and safety refreshers online. In addition, all ODA investigators attend grower/applicator meetings to enhance their knowledge of the regulated community. ODA investigators attended EPA's Pesticide Inspector Residential Training in Puyallup, Washington, from March 31 to April 3, 2014, and in Savannah, Georgia, from May 19 to 23, 2014. ODA investigators also participated in EPA's Pesticide Regulatory Education Program in Davis, California, from September 10 to 12, 2013, and in Orlando, Florida, from April 27 to May 1, 2014. From April 29 to 30, 2014, ODA investigators, as well as ODA's registration and certification/licensing staff, participated in the Oregon Pesticide Symposium in Salem, Oregon.

2. Training at Oregon OSHA

Each year, all Oregon OSHA compliance officers attend the Oregon Pesticide Symposium, an annual multi-agency event organized by Oregon OSHA. During the symposium, refresher courses on health and safety and case development are provided and lessons learned during the past year are discussed. The 2014 Oregon Pesticide Symposium featured speakers from the Oregon Institute of Occupational Health Sciences, Oregon Fire Marshal, Oregon Department of Transportation, Oregon Department of Forestry, Oregon Health Authority, National Pesticide Information Center, Oregon Department of Environmental Quality, ODA, Oregon OSHA, and EPA.

F. Performance Measures for Enforcement – Pilot Project

ODA participated in EPA's pilot project on new performance measures for enforcement. Prior to finalizing the new measures, EPA determined that a few states should pilot these performance measures. ODA volunteered to be one of the pilot states to use the new performance measures. ODA tracked the draft measures, reported quarterly to the project coordinator, participated in multiple conference calls, and provided feedback to EPA.

G. Special Activities Conducted by ODA

In the summer of 2013, ODA investigated four separate bumble bee kills related to the applications of dinotefuran or imidacloprid on linden trees (*Tilia* species). The pesticide applications were made using a variety of methods, including foliar spray, tree injection, soil drench, and basal bark spray. ODA coordinated activities with EPA and Oregon State University on these investigations and worked cooperatively with the Xerces Society. ODA kept EPA Headquarters and Region 10 well informed of the activities associated with its investigations. To minimize further potential negative effects to bees, in June 2013 ODA adopted a temporary rule to prohibit the use of dinotefuran on any plants.

On November 12, 2013, ODA determined that the use of dinotefuran or imidacloprid on *Tilia* species, regardless of method of application, represented an unacceptable risk to bees. In response, ODA added a new requirement, as a condition of 2014 state pesticide registration,

on the pesticide labels for dinotefuran or imidacloprid that any use on *Tilia* species, regardless of method of application, is prohibited. It is likely that the pesticides with the newly revised labels will not be in the market place until 2015 or later.

In June 2014, ODA received several reports of bee kills because of pesticide use on linden trees. ODA documented three incidents of imidacloprid use related to the bumble bee kills. Again, ODA worked closely with EPA and Oregon State University on these investigations. In response to the 2013 and 2014 bee kills, ODA enacted an emergency temporary rule on June 24, 2014, prohibiting the application of any product containing dinotefuran or imidacloprid, regardless of application method, to linden trees, basswood trees or other *Tilia* species.

Because of ODA's outreach efforts regarding the hazards to pollinators when using dinotefuran or imidacloprid on *Tilia* species trees, pesticide applicators began using thiamethoxam or clothianidin as alternatives or replacements. Unfortunately, thiamethoxam and clothianidin are closely related chemically to dinotefuran and imidacloprid (all four are nitroguanidine neonicotinoid insecticides) and can be equally or possibly more hazardous to bumble bees. Therefore, to prevent the strong likelihood of additional bumble bee deaths, ODA is currently working on a permanent state rule that will prohibit the application of dinotefuran, imidacloprid, thiamethoxam, and clothianidin, regardless of application method, to linden trees, basswood trees or other *Tilia* species. ODA anticipates that the rule will be in place in Spring 2015.

In June 2014, ODA also resampled the linden trees that had been treated with dinotefuran or imidacloprid in 2013. ODA took flower and leaf samples and analyzed them for either dinotefuran or imidacloprid, depending on which pesticide the trees had been previously treated with. ODA's laboratory found dinotefuran in the linden trees that had been treated a year ago using soil drench or basal bark methods. ODA also found imidacloprid from the linden trees that were treated more than a year ago using soil drench method. On November 24, 2014, ODA forwarded the results to EPA's Office of Pesticide Programs for review and further action.

H. New Legislations and Regulations

Two temporary state rules were in effect in FY 2014: (1) Oregon Administrative Rule (OAR) 603-057-0386 that prohibited the use of dinotefuran on any plants, effective June 27, 2013, to December 24, 2013; and (2) OAR 603-057-0387 that prohibited the use of dinotefuran or imidacloprid on linden and other *Tilia* species trees, effective June 26, 2014, to December 23, 2014. Both of these temporary rules were adopted in response to bee kills.

I. Action Items from FY 2013 End-of-Year Reviews

1. ODA

In FY 2013, EPA Region 10 made six recommendations to ODA's enforcement program, and ODA addressed them as follows:

- a. EPA Recommendation: For non-PEI inspections, document in the inspection reports the act of presenting state identifications.

ODA Action: ODA developed a policy that inspectors should be presenting their state identifications and documenting their actions in their inspection reports.

- b. EPA Recommendation: Document all communications that ODA has prior to actual inspections.

ODA Action: ODA addressed this recommendation. Investigators now document all communications prior to the actual inspections either in the narrative portions of the inspection reports or in the notes in the case files.

- c. EPA Recommendation: In the sampling plans, provide more details on how sample locations, sample types, and number of samples are chosen.

ODA Action: ODA addressed this recommendation. The sampling plans now include more details on how sample locations, types, and numbers are chosen.

- d. EPA Recommendation: Take some photographs during market place inspections even if no violations are found.

ODA Action: ODA indicated that they will include set-up photographs for market place inspections even if no violations are found.

- e. EPA Recommendation: Strive to include maps in non-agricultural use observations even if no violations are found.

ODA Action: ODA addressed this recommendation. Investigators are including maps for non-agricultural use observations even if no violations are found.

- f. EPA Recommendation: Develop a Standard Operating Procedure to address finalizing the narrative portion of the inspection reports and administrative records.

ODA Action: ODA developed a new procedure for writing the inspection reports. Investigators are to add an Investigator Recommendations section in the narrative reports, to differentiate between the case reviewer's conclusions and the investigators' findings.

2. Oregon OSHA

There was no action item from the previous Oregon OSHA end-of-year review.

J. Conclusions and Recommendations for Compliance/Enforcement

1. ODA

ODA has an excellent enforcement program. In FY 2014, ODA greatly improved the time it took to write inspection reports, issue enforcement actions, and generate laboratory analysis reports. EPA continues to be impressed by the number of samples analyzed. ODA analyzed 379 more environmental samples than the original projection of 59. EPA found that inspections conducted were thorough, and the enforcement actions issued were consistent with the enforcement response policy.

EPA did not identify any deficiencies requiring mitigation measures. EPA has a few observations and recommendations that can help strengthen ODA's enforcement program:

- a. For non-PEI inspections, document in the inspection reports the act of presenting state identifications;
- b. Take some photographs during market place inspections even if no violations are found;
- c. Strive to include product labels in all use cases;
- d. Strive to include maps in all case files involving use follow-up inspections; and
- e. Look for opportunities to cite all pertinent violations of Oregon rules.

2. Oregon OSHA

Oregon OSHA continues to implement an excellent WPS enforcement program. In FY 2014, Oregon OSHA exceeded the projected number of inspections. Compliance officers conducted thorough and well-documented inspections. Checklists were used during interviews with handlers and workers, and Letters of Corrective Action were used to ensure that violators came back into compliance. Furthermore, the enforcement actions issued were timely and consistent with the enforcement response policy. EPA does not have any recommendations for Oregon OSHA's enforcement program.

IV. PROGRAMS

A. Worker Safety

1. Certification and Training (C&T) of Pesticide Applicators by ODA

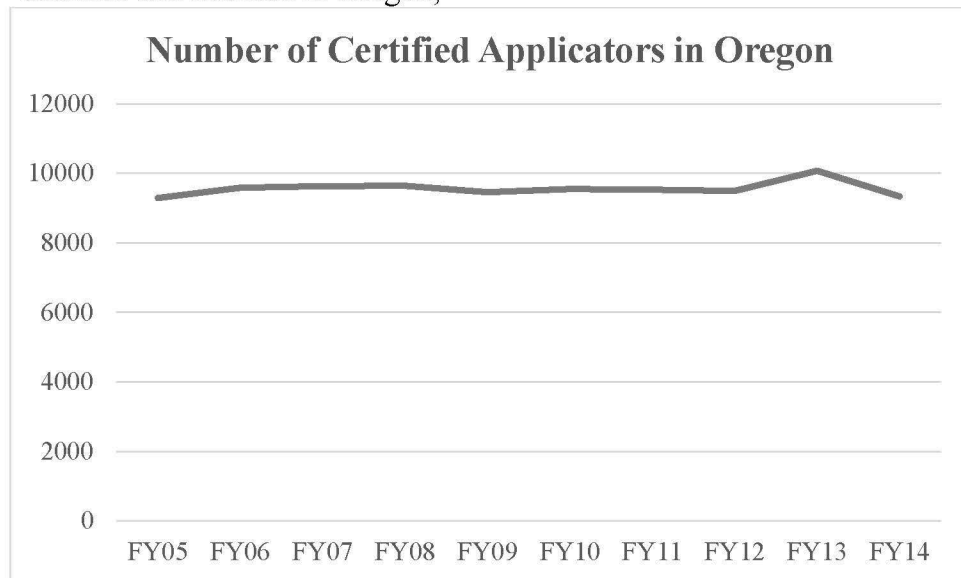
- a. Previous Recommendations

None.

b. Accomplishments

ODA met all the C&T program commitments described in the FY 2014 workplan. A detailed description of ODA's C&T program activities can be found in Appendix F. ODA's major accomplishments in FY 2014 are listed below:

- (1) A total of 4,206 private applicators and 5,130 commercial applicators were certified and licensed in Oregon;



The figure above shows the number of certified applicators in the State of Oregon in the past 10 years.

- (2) ODA staff audited 16 of the 20 testing centers to ensure all examinations are accounted for and to ensure all security agreements are current;
- (3) ODA evaluated recertification courses for applicators and consultants. ODA audited 63 training classes for quality and content and accredited 1,083 continuing education classes;
- (4) ODA participated as presenters in 90 recertification training sessions;
- (5) To address the high profile bee kill cases and the adoption of temporary state rules to protect bees, ODA developed brochures and training modules related to pollinator protection, presented at numerous classes and workshops, and sent emails to licensed applicators and stakeholders. ODA also updated its Insecticide and Fungicide examinations to add information regarding pollinator protection;
- (6) To protect workers from potential adverse effects of zinc phosphide, ODA coordinated with Oregon OSHA and issued a FIFRA Section 24(c) registration for zinc phosphide's use on cabbage bait, to control Belding's ground squirrels in

alfalfa fields located in four Oregon counties. This special local needs registration mandates specific ODA training prior to the use;

- (7) ODA actively worked to reinstate the reciprocal licensing with the Idaho State Department of Agriculture, to recognize most of Idaho's certification and licensing types and categories;
- (8) ODA made special efforts to provide materials for pre-license training of private applicators in Spanish and for the new apprentice license;
- (9) 12 publications were developed or revised by ODA and posted on its web site. Topics included investigation and enforcement, applicator responsibilities, pollinators protection and health, alternatives to neonicotinoid pesticides, and pesticide exposures; and
- (10) ODA coordinated and communicated with Oregon State University and independent consultants around the state who provided pre-license training related to the Oregon Integrated Pest Management (IPM) in Schools Law. This law requires applications of most pesticides on school property be conducted by licensed applicators.

c. State Feedback

ODA has three suggestions for EPA:

- (1) Complete the revision of National Pesticide Certification Core Manual soon and translate it into Spanish;
- (2) For pesticide products containing active ingredients that are highly toxic to fish, add symbols onto product labels that will alert users that the pesticide products used may be highly toxic to fish; and
- (3) Add residual toxicity values onto product labels, especially for pesticide products that contain active ingredients that may be highly toxic to bees. This will enable states to further achieve their pollinator protection goals.

d. EPA Recommendations

None.

2. Worker Protection Program by Oregon OSHA

a. Previous Recommendations

None.

b. Accomplishments

In FY 2014, Oregon OSHA conducted many activities related to WPS. For more details, see Oregon OSHA Pesticide Emphasis Program Annual Report Federal Fiscal Year 2014 (Appendix E). Oregon OSHA has the following major accomplishments in FY 2014:

- (1) Presented at 23 agricultural classes and workshops, with a total of 3,266 attendees;
- (2) Organized the Annual Oregon Pesticide Symposium, to foster agency partnerships, to focus on enhancing each other's investigations and to promote joint training opportunities. Participants included members from ODA, Oregon Department of Environmental Quality, Oregon Department of Transportation, Oregon Health Authority, Oregon Department of Forestry, Oregon Fire Marshal, Oregon Institute of Occupational Health Sciences, National Pesticide Information Center, Oregon OSHA, and EPA Region 10;
- (3) Assisted EPA in revising its Label Review Manual. Oregon OSHA found a few pesticide labels that required incorrect, outdated respirators. Oregon OSHA, National Institute for Occupational Safety and Health, and EPA held numerous conference calls and meetings to discuss this issue. Oregon OSHA's suggestions for pesticide label language were incorporated into EPA's Label Review Manual, Chapter 10, Table 5, which includes respirator terminology and coding. Thanks to Oregon OSHA's efforts, EPA's Label Review Manual was revised in May 2014;
- (4) Developed two Hazard Alerts related to fumigation management plans for aluminum phosphide products;
- (5) Worked with Oregon's Pesticide Analytical and Response Center (PARC) Board to revise Oregon OSHA's Standard Operating Procedures (SOPs) for communicating and collaborating with PARC member agencies and assisted in the development of other agencies' SOPs;
- (6) Worked cooperatively with ODA and submitted comments to EPA on the proposed WPS revisions; and
- (7) Updated Oregon OSHA's *Pesticide Use and Your Personal Protective Equipment* brochure.

c. State Feedback

None.

d. EPA Recommendations

None.

B. Water Quality Program

1. Previous Recommendations

None.

2. Accomplishments

In FY 2014, ODA worked with other state agencies and various stakeholders, including local watershed-based groups, Oregon State University Extension Service, pesticide users, growers, and pesticide dealers, to address pesticide related water quality issues. ODA met the Water Quality Program commitments in its FY 2014 workplan. A detailed description of ODA's accomplishments can be found in Appendix G.

In Oregon, the Water Quality Pesticide Management Team (WQPMT) coordinates monitoring and other activities to improve water quality related to pesticides. Team members consist of representatives from ODA, Oregon Department of Environmental Quality, Oregon Health Authority, Oregon Department of Forestry and Oregon State University. In FY 2014, ODA was an active member of the WQPMT and led the team's effort to designate the FY 2014 Pesticides of Concern for Oregon.

In partnership with the WQPMT, ODA also evaluated more than 600 surface water samples collected from the Pesticide Stewardship Partnerships (PSP) program watersheds, identified Pesticides of Interest and Pesticides of Concern, and managed Pesticides of Concern. In FY 2014, ODA listed 73 active ingredients as Pesticides of Interest, listed seven active ingredients as Pesticides of Concern, actively managed five active ingredients, and demonstrated progress for four active ingredients. A summary of ODA's pesticide-specific and program management activities can be found in EPA's Pesticides of Interest Tracking System (POINTS) database at <http://www.points.wsu.edu/reports/fullReport.aspx>. In addition, the Oregon Legislature provided new funds to expand the PSP program. Using these funds, water quality monitoring was conducted in four new watersheds: Middle Deschutes, South Coasts, South Umpqua, and Rogue. The WQPMT used water monitoring data and information from their stakeholder engagement process to identify which two of the four watersheds would become new PSP projects. ODA worked with the local partners in the four watersheds to organize monitoring, pesticide waste collections, and outreach efforts.

ODA conducted outreach and education related to pesticides and water quality at training courses and at grower association and applicator meetings. In FY 2014, ODA gave 17 presentations throughout the state to an average audience size of ten to twenty people per session. At these events, ODA presented information on the risk factors associated with

pesticide use and showed examples of existing pesticide label language that demonstrates how risk factors are communicated and mitigated.

3. State Feedback

ODA appreciated the excellent support provided by EPA Region 10 during the past year. EPA Region 10 enhanced communication across Region 10 state agencies and leveraged resources across states. ODA has two recommendations for EPA:

- a. Increase funding to the state's water quality program to support additional water quality outreach and education efforts; and
- b. Analyze the information on diuron submitted by ODA and make appropriate label changes.

4. Conclusions and Recommendations

EPA greatly appreciates ODA's ongoing efforts to monitor water quality in Oregon and communicate water quality conditions to stakeholders at all levels. ODA's presentations gave growers, applicators, and members of the public meaningful information on the condition of their watersheds. ODA's close collaboration with other Oregon state agencies strengthen the ability to address water quality problems when they arise. By engaging with the other states in Region 10, ODA shares information and advice that builds capacity in the region. Finally, by sharing data and Oregon's experience with EPA HQ, ODA is providing a necessary feedback loop that will ultimately improve label language. There are no new recommendations.

C. Endangered Species Protection Program

1. Previous Recommendations

None.

2. Accomplishments

In FY 2014, ODA met the Endangered Species Protection Program (ESPP) commitments in its workplan. A detailed description of the ODA's ESPP can be found in Appendix H. The OPP Field Program for Endangered Species Data Collection Sheet for FY 2014 End-of-Year Report is attached in Appendix I. Major accomplishments in FY 2014 are listed below:

- a. ODA worked with U.S. Fish and Wildlife Service and Oregon Department of Fish and Wildlife to develop special local needs restrictions, under FIFRA Section 24(c), for zinc phosphide use on alfalfa fields located in the same county as a wildlife refuge;

- b. ODA developed a newsletter article and issued a press release related the death of a great horned owl, a federally protected species under the Migratory Bird Treaty Act. The owl appeared to be a victim of secondary poisoning; it tested positive for two second generation anticoagulant rodenticides which are registered by EPA only for rodent control. To prevent future poisonings, ODA worked with Oregon Department of Fish and Wildlife and developed a newsletter article and a press release. In addition, ODA included news of this owl's death in many presentations conducted;
- c. ODA provided outreach and education to pesticide users, commodity commissions, grower organizations, consultants, and other interested parties. ODA staff provided information related to the protection of threatened and endangered species at approximately 12 training classes; and
- d. ODA continued to work with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Oregon Department of Fish and Wildlife on registrations issued for emergency exemptions (FIFRA Section 18) and special local needs (FIFRA Section 24(c)).

3. State Feedback

ODA has the following recommendations for EPA:

- a. Use the same language on the pesticide labels for no-spray areas -- not "buffer" on one label and "no-spray zone" on another label; and
- b. On the pesticide label, add a new box specifically for buffer zone information and specify the buffer widths. ODA indicated that growers do not want to use a computer to find buffer zone information.

4. EPA Recommendations

None.

Appendix A



United States
ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

Pesticides Enforcement Cooperative Agreement Accomplishment Report

State/Tribes	Oregon	Fiscal Year	2014	Reporting Period	07/01/13 - 06/30/14	<input type="checkbox"/> Total Program Accomplishments		<input checked="" type="checkbox"/> Work Plan Activities Only				
Enforcement Accomplishments This Reporting Year	Agricultural		Nonagricultural		Experi- mental Use Permit	Producing Establish- ment	Market- place	Imports	Exports	Certified Applicator Records	Restricted Use Pesticide Dealers	TOTAL
	Use	For Cause	Use	For Cause								
Total Inspections Conducted	8	15	10	15		3	5			10	10	76
Federal Facilities												
Samples Collected	Physical	12	300		126							438
OGIES	Documentary	1								10		11
Civil Complaints Issued		1	15		22					7		45
Criminal Actions Referred												
Administrative Hearings Conducted			2									2
License/Certificate Suspension (5)												
License/Certificate Revocation												
License/Certificate Conditioning or Modification												
Number of Warnings Issued (1) NOV **			18	2	28		5			33		86
Stop-Sale, Seizure, Quarantine or Embargo **** 3 & 8							15					15
Cases Forwarded to EPA for Action (7) includes PLR ***						3	24					27
Other Enforcement Actions												
Number of Cases Assessed Fines (2)		1	15		22					7		45

Reset Form

EPA Form 5700-33H

ED467-000036390

EPA-6822_028940



United States
ENVIRONMENTAL PROTECTION AGENCY

Washington, DC 20460

Pesticides Enforcement Cooperative Agreement Accomplishment Report

State/Tribes Fiscal Year Reporting Period ☒ Total Program Accomplishments ☐ Work Plan Activities Only

Enforcement Accomplishments This Reporting Year	Agricultural		Nonagricultural		Experi- mental Use Permit	Producing Establish- ment	Market- place	Imports	Exports	Certified Applicator Records	Restricted Use Pesticide Dealers	TOTAL
	Use	For Cause	Use	For Cause								
Total Inspections Conducted	7	35	5	65			26			43	18	199
Federal Facilities												
Samples Collected	Physical											
	Documentary											
Civil Complaints Issued												
Criminal Actions Referred												
Administrative Hearings Conducted												
License/Certificate Suspension												
License/Certificate Revocation												
License/Certificate Conditioning or Modification												
Number of Warnings Issued												
Stop-Sale, Seizure, Quarantine or Embargo												
Cases Forwarded to EPA for Action												
Other Enforcement Actions												
Number of Cases Assessed Fines												

Reset Form

EPA Form 5700-33H

Appendix B



United States
ENVIRONMENTAL PROTECTION AGENCY

Washington, DC 20460

Pesticide Container/Containment Inspection and Enforcement Accomplishment Report

State/Tribe Fiscal Year Reporting Period ☒ Total Program Accomplishments ☐ Workplan Activities Only

Enforcement Accomplishments This Reporting Year	PEI with Containment	Non-PEI Containment	Total
Total Inspections Conducted	<input type="text" value="2"/>	<input type="text" value="1"/>	<input type="text" value="3"/>
Samples Collected			
Physical	<input type="text"/>	<input type="text"/>	<input type="text"/>
Documentary	<input type="text" value="30"/>	<input type="text"/>	<input type="text" value="30"/>
Civil Complaints Issued	<input type="text"/>	<input type="text"/>	<input type="text"/>
Criminal Complaints Referred	<input type="text"/>	<input type="text"/>	<input type="text"/>
Administrative Hearings Conducted	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number of Warnings Issued	<input type="text"/>	<input type="text"/>	<input type="text"/>
Stop-Sale, Use and Removal Order (SSURO)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Cases Forwarded to EPA for Action	<input type="text" value="3"/>	<input type="text"/>	<input type="text" value="3"/>
Other Enforcement Actions (e.g. Advisory Letters)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number of Cases Assessed Fines	<input type="text"/>	<input type="text"/>	<input type="text"/>

Container/Containment Violations	
Refillable Containers	
1. Deficient labeling (i.e. cleaning and disposal instructions)	<input type="text"/>
2. Deficient container design (valves, openings)	<input type="text"/>
3. Producing establishment registration violations	<input type="text"/>
4. No contract manufacturing agreement, residue removal instructions, list of acceptable containers	<input type="text"/>
5. Deficient management procedures & operation	<input type="text"/>
6. Record keeping	<input type="text"/>
Containment	
7. Secondary containment & pads – capacity/design	<input type="text"/>
8. Secondary containment & pads – site management	<input type="text"/>
9. Secondary containment & pads – record keeping	<input type="text"/>
Total Violations	<input type="text"/>

Appendix C

CONSOLIDATED PESTICIDE COOPERATIVE AGREEMENT END OF YEAR SUMMARY FOR FY2014 OREGON ENFORCEMENT

Worker Protection Standards (WPS)

The Department continues to use inspections conducted under the cooperative agreement to notify constituents of the provisions of the rule and to ensure compliance with the current worker protection requirements. The Department maintains a Memorandum of Agreement with OR-OSHA to coordinate regulatory activities. The Department and OR-OSHA jointly evaluates specific situations of compliance to determine the primary agency for response. OR-OSHA also has a Cooperative Agreement with EPA Region 10 for WPS compliance-monitoring activities as well as enforcement of WPS in Oregon.

- **Product compliance** – Oregon requires annual pesticide registration. The Department continues to review product labeling as a component of this annual product registration. While WPS label review can result in inspection activities, no EPA funding was used for label review conducted during the registration process.
- **Use inspections** – The Department uses agricultural use follow-up (AUF) and agricultural use observation (AUO) inspections to determine compliance with WPS. The Department also uses the operator/applicator record review (ARI) inspections to monitor compliance with WPS Operator/Grower Information Exchange (WPS-OGIE) requirements. The WPS-OGIE checklist is used to determine if information regarding the WPS label requirements was exchanged between the commercial operator and the grower. The Department conducted (11) focused compliance monitoring WPS-OGIE inspections.
- **Tips and complaints** – Alleged complaint information as well as alleged WPS pesticide misuse violations are maintained in an electronic database system (Pesticide Enforcement Database). This database allows the Department to track key goals when identified and ensure information is secure, up-to-date, and timely.
- **State-specific compliance assistance activities** – The Department continues to provide WPS outreach and compliance assistance activities in cooperation with EPA, OR-OSHA, Oregon State University – Extension Service, Oregon Department of Human Services – Public Health Division, and the Oregon Pesticide Analytical Response Center (PARC).
- **EPA Agriculture Compliance Assistance Center** – The Department continues to work through EPA Region 10 and the Ag. Center to identify information and compliance assistance needs.
- **Reporting** – The Department continues to report progress of compliance and enforcement activities related to WPS on the EPA report form. Specific WPS inspection activities (WPS-OGIE) are tracked using the Pesticide Enforcement Database.
- **Training** – The Department continues to coordinate with EPA Region 10 staff regarding specific needs for WPS training and materials. Department staff participated in training with OR-OSHA staff. This joint training regarding WPS regulatory activities was held in Salem, Oregon, April 29-30, 2014.
- **WPS enforcement** – Enforcement responses are coordinated with OR-OSHA to ensure consistency. The Department addressed enforcement actions as appropriate under ORS 634.

Pesticide Compliance/Enforcement Priorities

- **Assisting EPA in ensuring anti-microbial products are federally registered and efficacious** – The Department works with EPA Region 10 when unregistered anti-microbial pesticide products and hospital disinfectants were identified. If the Department cannot pursue action under state law, referral is made to EPA Region 10.
- **Disease vector control** – The Department conducted (4) non-agricultural use observations (NUO), (2) non-agricultural use follow-ups and (2) application record inspections regarding vector control during FY2014.

- **e-Commerce involving pesticides used to protect human health** – It is increasingly common for pesticides that make public health claims and products that make claims to control pests to be advertised on the Internet. For many of these products, it is unclear what their federal registration status is, let alone any efficacy claims. The Department conducted (17) pesticide label reviews (PLRs) specifically associated with e-commerce of products making pesticide or public health claims. These cases were referred to EPA Region 10 for review of potential violations of FIFRA.
- **Fumigation application initiative** – The Department conducted (3) focused agricultural use observation (AUO) inspections related to soil fumigant use; in the original cooperative agreement, the projection was for ODA to conduct 5 inspections related to fumigation application. On July 10, 2013, EPA and ODA renegotiated to 2 inspections because there was a reduction of funds from EPA. Staff provided and discussed EPA's implementation of risk mitigation measures for soil fumigant pesticides. No violations were documented. In addition, the Department conducted (1) agricultural use follow up (AUF) inspection specific to soil fumigation and found no violations.
- **Return/collection centers initiative** – The Department conducted (20) focused marketplace inspections (MPI) related to return and collection of pesticide products. Staff discussed collection and return policies with retailers as well as Oregon regulation of broken or mislabeled products.

Work Activities to Support Core Pesticide Compliance and Enforcement Program

- **Pesticide enforcement residue sampling and analysis** – The Department's Laboratory Services section has a history of participating in quality assurance programs approved by FDA, EPA, and other government agencies and professional organizations. This participation continues with particular emphasis in the following areas:
 - Quality assurance plans
 - Analytical methods
 - Cross contamination screening
 - Check samples
 - Check analysis procedures
 - Training of analytical chemists

Laboratory Services reported analytical results on (438) pesticide residue samples. This is a (143) sample increase over last year of (295) samples with the average of the previous three years being (297) samples. In addition to the work Laboratory Services does for the Pesticide Program, they also do work for food safety, shellfish, bay waters, dairy, confined animal feed operations, fertilizer, poultry, export and other agencies like OR Department of Environmental Quality. Laboratory Services also conducts an onion market assurance program as a result of previous Pesticide Program significant cases. By no means is this list exhaustive of the work the Department's Laboratory Services conducts.

- **High profile or significant cases** – The Department and EPA Region 10 coordinated significant pesticide cases including those referred to the Department by the EPA under FIFRA Section 27. The Department completed compliance monitoring and enforcement review of (5) cases that met criteria established as significant.

1. **Case No. 120090** – The Department responded to a concern made by residents of the Jack Pine Village and the River Pines Estates in northern Klamath County, Oregon over right-of-way pesticide applications by the Klamath County Weed Control program resulting in dead and dying trees in or near the rights-of-way in the two neighborhoods.

The Department found that OutPost 22K was applied over sandy soils with a high water table, for the purpose of controlling noxious weeds. The active ingredient of OutPost 22K is picloram, its product label states that picloram can impact non-target plants and ground waters, and that applicators should avoid the use of OutPost 22K on rapidly permeable soils, over high water tables, or near desirable plants. The label prohibits the use of OutPost 22K "when circumstances favor movement from treatment site." The label also states: "Do not allow run-off or spray to contaminate wells, irrigation ditches or any body of water used for irrigation or domestic purposes." The OutPost 22K was applied to the rights-of-way under circumstances that favored movement from the rights-of-way. The Department found the public applicator applied the product in a faulty, careless, or negligent manner. A civil penalty for \$7,215 was issued against the applicator.

2. **Case No. 130152** – The Department received information regarding a goose die-off in Salem, Marion County, Oregon and coordinated efforts with the Oregon Department of Fish and Wildlife (ODFW) to investigate.

ODFW had the stomach and gizzard contents of collected geese tested and it was found that the ingestion of zinc phosphide was the cause of death. Both ODA and ODFW surveyed the area and found no indication of zinc phosphide product use. ODA contacted several businesses in the area to inquire about vole control and potential zinc phosphide use. Insufficient information was available to determine the source of the zinc phosphide. ODA distributed appropriate zinc phosphide use instructions to distributors and applicators for zinc phosphide product use.

3. **Case No. 130154** – The Department conducted a joint inspection of Virginia Garcia Health Center in Forest Grove, Washington County, Oregon with OR-OSHA after complaints of symptoms similar to those of an exposure to pesticides were reported to OR-OSHA. OR-OSHA was the lead for the inspection while Department staff participated in the inspection and reviewed the product label. It was determined that the product was applied according to the label and the operator and applicator were appropriately properly licensed during the time of the investigation.
 4. **Case No. 130486** - The Department investigated this report of dead bumble bees under a single tree treated three months earlier in Hillsboro, Washington County, Oregon. Although some of the treated active ingredient, dinotefuran was found in bumble bees and foliage of treated lindens, ODA found no indication of an application being made inconsistent with labeling or in a faulty, careless or negligent manner.
 5. **Case No. 130492** - The Department received a concern via the Oregon Department of Environmental Quality (DEQ) and the Oregon Emergency Response System (OERS) about a crayfish trapper finding a large number of crayfish dead in his traps in the Yamhill River near Dayton, Yamhill County, Oregon. The ODA Pesticide Analytical Response Center (PARC) coordinated the efforts of ODA, DEQ, Oregon Fish and Wildlife (ODFW) and the Oregon State Police (OSP) in response to this concern. None of the agencies were able to determine the cause of the crayfish demise or identify any toxins in the river. The complainant stated he had seen a cloud of spray drift over the river coming from the orchard across from the boat ramp. The Department could not confirm nor deny the allegation due to the time between the application and the complaint and the transitory nature of the river. A letter of advisement was issued to the landowner.
- **Misuse** – The Department continues to address pesticide misuse, particularly, as it relates to high risk and food safety issues. Pesticides Program in cooperation with ODA Food Safety Program, US EPA, and US Food and Drug Administration, place special emphasis on inspecting pesticide residue and misuse incidents. There were approximately (7) cases during FY2014 that involved known pesticide residue issues.
 - **E-Commerce** – The Department conducted some monitoring (tracked as product label reviews) of e-commerce sales and advertising for violation of ORS 634 and FIFRA. Cases were referred to EPA Region 10.
 - **Pesticide inspector residential training (PIRT)** – The Department includes participation in these courses or any case development courses in the work plan whenever possible. The participation of Department staff in trainings conducted outside Oregon is limited due to the availability of state funds, spending authority, and state fiscal policies. Staff did participate in the Structural Pesticide Inspector Residential Training in Puyallup, Washington March 31 to April 3, 2014 and the US EPA Ag Pesticide Enforcement PIRT training course in Savannah, Georgia May 19-23, 2014.
 - **Pesticide regulatory education program (PREP)** – Again, the Department includes participation in these courses or any case development courses in the work plan whenever possible. Staff attended the Senior Executive Lab Management course in Davis, California September 10-12, 2013, and the Structural Pest Control Issues course in Orlando, Florida April 27 to May 1, 2014.
 - **Other training opportunities** – EPA Region 10 continues to work with the Department to sponsor training opportunities, particularly for investigative staff.
 - **EPA inspector credentials** –The Department maintained EPA inspector credentials for four inspectors stationed throughout the state; applicable training requirements were met or exceeded. Two inspectors renewed and one inspector maintained credentials, and one inspector was in training to receive credentials.
 - **Enforcement reporting** – EPA credentials allow credentialed Department staff, 1) to conduct inspections under Federal provisions not covered by state law and 2) to conduct inspections at EPA's request (regardless of

state/tribal boundaries). The Department provided to EPA Region 10 all inspection reports conducted using EPA credentials.

- **Groundwater/surface water protection enforcement** – The Department continues to monitor compliance with and enforce labeling as part of use, producer establishment, marketplace, and dealer inspections. Enforcement activities involving the protection of water are addressed through follow-up, applicator licensing/record, and dealer record inspections, and through review of pesticide product labels. Particular emphasis is placed on compliance with required labeling statements. The Department also added additional tracking of active ingredients of concern and water-related cases.
- **Compliance assistance** – The Department evaluated compliance assistance activities conducted in cooperation with EPA Region 10. When new EPA policies are issued, the Department evaluates and reflects the new policies as needed.
- **Section 19(f) compliance and enforcement activities (container-containment)** – The Department does not have state pesticide containment regulations. Rather, the Department continues to conduct outreach and education related to the container-containment regulations. Compliance assistance focused on providing information to covered businesses to ensure they were aware of the requirements as well as to facilitate compliance. Upon delivery of EPA developed fact sheets, standard presentations, How to Comply guides, checklists, Q & A's, trainings, and a compliance strategy regarding this program, the Department made (or will make) these tools available to regulated parties.

Furthermore, the Department continues to use the state pesticide product registration process, use inspections, marketplace inspections, dealer inspections, and producer establishment inspections to ensure compliance with the container-containment regulations.

The Department evaluated compliance specific to the containment regulations using inspections conducted under federal credentials. This included (2) targeted inspections relating to container-containment; compliance was inspected and documented with investigative findings referred to EPA Region 10.

- **Special action chemicals, cancellations, suspensions, other major regulatory actions and national high risk initiatives** – The Department provided information to industry as well as pesticide users through education and outreach activities on special action chemicals identified by EPA (through cancellations, suspensions, and/or special initiatives).
- **Section 18 and 24(c) monitoring** – The Department continues to monitor activities associated with FIFRA Section 18 authorizations and 24(c) registrations, especially when use violations are suspected.
- **Pesticide recalls** – The Department continues to monitor pesticide product recall information concerning quantities and locations of suspended or canceled pesticide products in Oregon. The Department worked with EPA staff to identify and conduct appropriate activities.
- **Endangered species enforcement** – EPA has not issued any endangered species protection bulletins in Oregon to date. Therefore, the Department did not collect or report information to EPA regarding endangered species.
- **Pesticide use in schools (urban pesticide use/IPM)** – The Department continues to conduct routine use observations of schools/districts pesticide use practices throughout Oregon. Future education outreach efforts were addressed in cooperation with EPA, the Pesticide Analytical Response Center, Oregon State University IPM Education program, Oregon Health Authority, as well as other resources.
- **25(b) pesticides** – Since January 2011, the Department has required state registration of 25(b) pesticide products for sale, use, and distribution in Oregon. Department registration staff review labeling to ensure compliance with the US EPA 25(b) exemption. Concerns found during product registration review or other enforcement activities are forwarded to EPA Region 10 for action under FIFRA.
- **Unregistered sources of active ingredients** – The Department continues to assist EPA Region 10 with reviewing this concern.

Compliance Enforcement Activities Summary

Due to the complexity of some inspections, an enforcement response is often completed in the fiscal year after the inspection is initiated. Therefore, inspections and enforcement response do not directly correlate with the year initiated.

- **Specific inspection activities**— Listed below are brief descriptions of specific inspection activities and the number conducted. For a graphic representation, refer to Fig. 1 in the Appendix.

1. **Operator/applicator record inspection (ARI)** – (53) completed. Commercial pesticide operators and public pesticide applicators are required to maintain specific record information (ORS 634.146 and OAR 603-57-0130). These inspection activities include a review of license status, recordkeeping requirements and label review for compliance.

In an effort to increase outreach and education, the Department chooses to conduct some of these inspections as compliance assistance. Of the 53 total inspections, (8) were Oregon compliance assistance inspections (not work plan activated).

2. **Dealer record inspection (DRI)** – (28) completed. Pesticide dealers are required to maintain specific record information for each sale or distribution of restricted use pesticides (OAR 603-57-0140). These inspection activities include a review of the license status of the pesticide purchaser.
3. **Marketplace inspection (MPI)** – (31) total completed. All pesticide products being delivered, distributed, sold, or offered for sale in Oregon are to be registered on an annual basis (ORS 634.016). These inspection activities include a review of pesticide product registration status, product label compliance, and product integrity.

In an effort to increase outreach and education, the Department chooses to conduct some of these inspections as compliance assistance. During the inspection, staff meet with the manager/owner of the facility, discuss the requirements for pesticide sale or distribution in Oregon, and provide an informational brochure. Of the 31 total inspections, (6) were Oregon compliance assistance inspections (not work plan activated).

4. **Agricultural use follow-up/observation (AUF/AUO)** – (65) completed. Of these, (50) were AUFs and (15) were AUOs. (1) AUO was a compliance assistance inspection (not work plan activated). These inspection activities are associated with agricultural production or forestry use and are based on complaint/concerns the Department received from various sources; allegations of misuse or violations of ORS 634 and FIFRA. Inspection activities include site visits, interviews, environmental sampling, and the collection of documentation and evidence to support or deny the alleged violation. These inspection activities include a review of license status and label review for compliance.
5. **Non-agricultural use follow-up/observation (NUF/NUO)** – (95) completed. Of these, (80) were NUFs and (15) were NUOs. These inspection activities are associated with non-agricultural use practices such as pesticide use in and around structures, rights of way, and public health vectors and are based on complaint/concerns the Department receives from various sources; allegations of misuse or violations of ORS 634 and FIFRA. Inspection activities included site visits, interviews, environmental sampling, and the collection of documentation and evidence to support or deny the alleged violation. These inspection activities include a review of license status and label review for compliance.
6. **Producer establishment inspection (PEI)** – (3) completed. These inspection activities are associated with the manufacture and production of pesticide products to ensure industry compliance with product registration, formulation, packaging, and labeling before and while products are distributed in the channels of trade. These inspection activities are conducted under the authority of ORS 634 and FIFRA. Inspections include site visits, interviews, product sampling, the collection of documents and evidence to show compliance, and referral to EPA Region 10 for enforcement case review.

The original agreement was for the Department to conduct (6) PEIs; on July 10, 2013, EPA and ODA renegotiated the number from 6 PEIs to 2 traditional PEIs and 1 focused Container/Containment inspection because there was a reduction of funds from EPA.

At the direction of US EPA Region 10, two (2) of the three PEIs were focused on compliance with pesticide

containment requirements. Inspections include site visits, interviews, the collection of documents and evidence of container/containment records, and referral to EPA Region 10 for enforcement case review.

7. **Experimental use inspection (EUP)** – (0) completed. There were no state EUPs applied for. The US EPA did not refer any Federal EUPs to Oregon either. These inspection activities are associated with the compliance monitoring of experimental use permits issued by the Department and EPA. Inspections include an onsite observation, a review of license status, product label and permit review for compliance, and referral to EPA Region 10 for enforcement case review if they are under the Federal EUP process.
 8. **Import/export inspections (IMP/EXP)** – (0) completed, none were referred to Oregon by US EPA. The objective of these inspections is to ensure pesticide products imported into or exported from the United States comply with the requirements of FIFRA. US EPA directs the Department to conduct these inspections on an as needed basis. These inspections are conducted under the authority of FIFRA and include site visits, interviews, product sampling, and the collection of documents and evidence to show compliance.
 9. **Pesticide label review (PLR)** – (24) referred to EPA Region 10 for potential violations of FIFRA. EPA Region 10 is currently tracking these cases and provides the Department periodic case status and enforcement action updates. This information is of critical business need to ensure to Department staff and our customers that alleged FIFRA violations are being addressed.
 10. **Tracking** – (61) completed. Tracking is a case designation for situations/complaints/concerns associated with pesticide use that either do not have sufficient information or do not need to proceed as a follow-up.
- **Compliance monitoring** - total of (360) cases in FY2014 completed. These cases include each of the inspection types listed in the specific inspection activities section above. For a graph of inspections completed for the past five years refer to Fig.3 in the Appendix. NOTE: This number does not match the 5700 because it includes Tracking cases which are not reported on the 5700 to the US EPA.
 - **Enforcement response** –The Department issued (146) separate enforcement actions **associated with violation of ORS 634**. Enforcement actions can include notice of violations (NOV), imposition of civil penalties (CP), as well as license actions, stop, sale, use, or removal orders, and embargo/detainments. Some cases resulted in multiple enforcement actions being issued to several parties. The specific enforcement response was based on several factors including magnitude of the violation, gravity of effect, and violation history. The Department uses this information to identify specific areas for future compliance focus and potential outreach opportunities. Refer to Fig.4 in the Appendix for a listing of NOVs and CPs issued for the past five years. In addition, Fig. 5 shows the case type and percentage of associated NOVs and CPs, while Fig 6. shows percentage of NOVs and CPs by violation type. As the US EPA counts enforcement response, the Department issued (220) enforcement actions. This would include administrative hearings, referrals to EPA (PEI, PLR), as well as double counting of civil complaints/penalties.

Other Accomplishments/Program Improvements

- **Case completion rate** – The Department uses a 120-day average as the goal for case completion. It is important to acknowledge that some cases are more complex or parties involved may not be available to promptly participate in the case enforcement process. We are pleased that during FY2014 the average for length of case completion was 79-days.
- **Work initiated in FY2014** – Each of the numbers discussed in previous sections are in regards to inspections or enforcement responses that were completed in FY2014. While some inspections are complex and the enforcement response is completed in subsequent fiscal years, many inspections are completed in the same fiscal year initiated. Approximately, 65% of the (433) inspections **initiated** in FY2014 were **completed** in FY2014. For more specific information about each of the inspection types, refer to Fig. 7 in the Appendix.
- **Enforcement actions resulting in verified compliance** – Verified compliance was approximately 47% in FY2014.
- **Compliance assistance program** – In order to reach as many of our customers as possible while also dealing with the reality of reduced resources, the Department began a pilot program of holding compliance assistance

classes for Commercial Pesticide Operators in FY2012. The pilot was successful with positive feedback from operators so the Department has continued to operate the program. Operators within specific license categories are invited to the class along with any licensed pesticide applicators associated with that operator. During the class, participants receive information on current issues specific to their field as well as one-on-one review of the pesticide application records. The classes are limited to no more than five operators. During FY2014 (8) operators completed a Compliance Assistance class.

- **Pesticide Enforcement Measures Pilot Project** – The Department participated in EPA's pilot project to update the pesticide enforcement measures reported by states and tribes to US EPA. The Department tracked the pilot measures, reported quarterly to the project coordinator, and participated in multiple conference calls to help better determine what the new measures would be. The final measures a good start moving forward.

APPENDIX

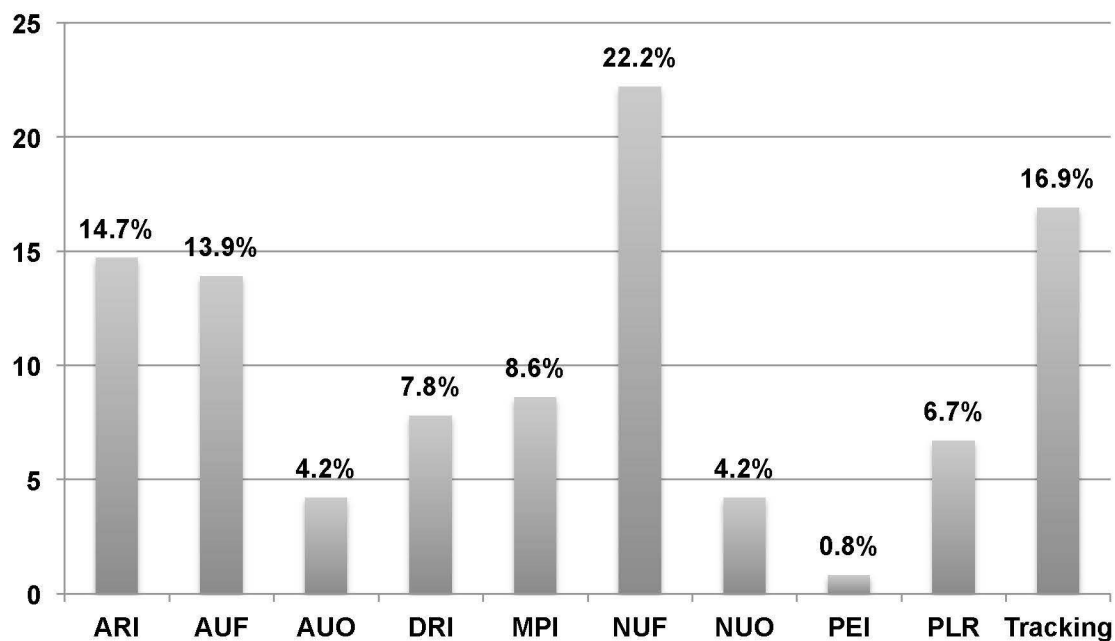


Fig. 1 Percentage of inspection by type

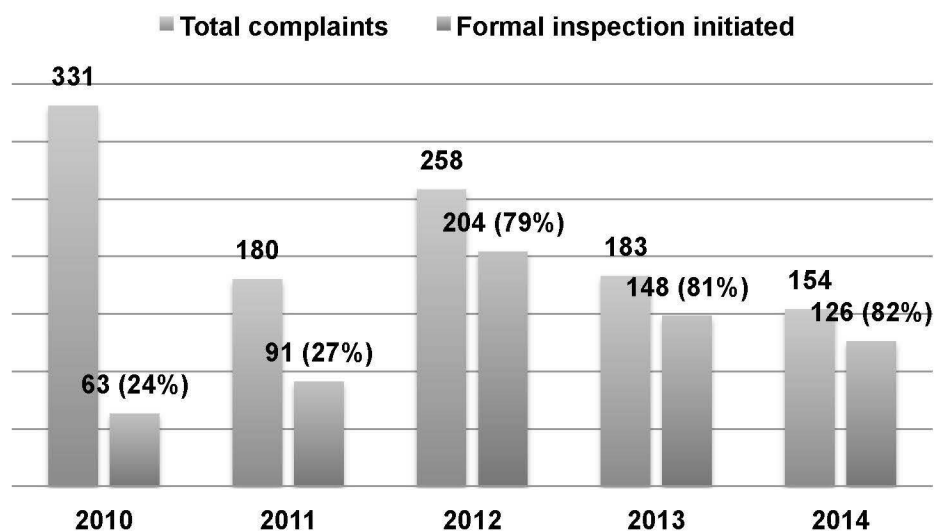


Fig. 2 Total complaints resulting in a more formal inspection

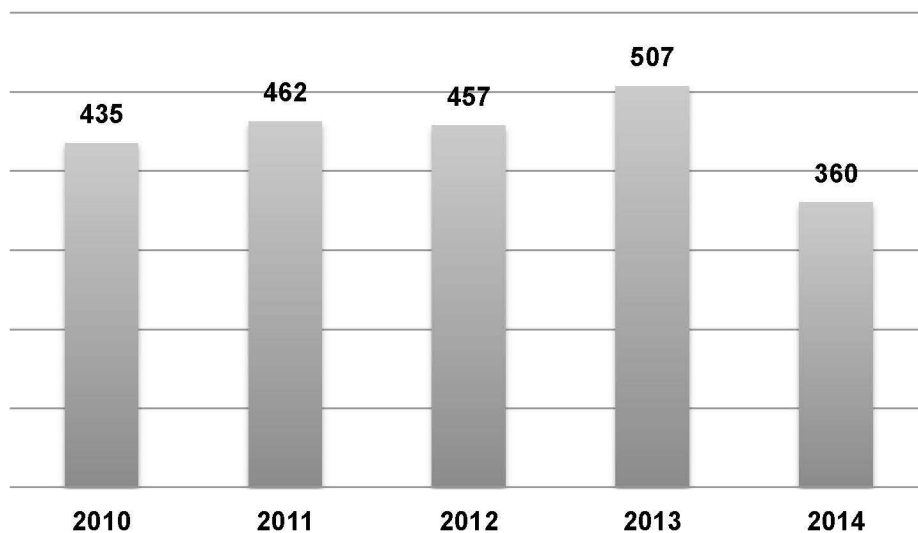


Fig. 3 Total inspections completed in each of the last five fiscal years

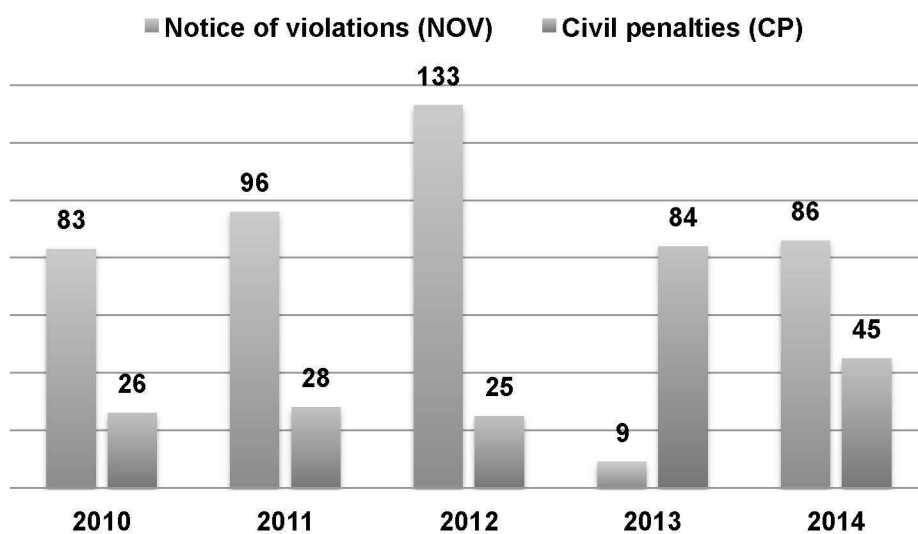


Fig. 4 NOV and CPs enforcement responses issued

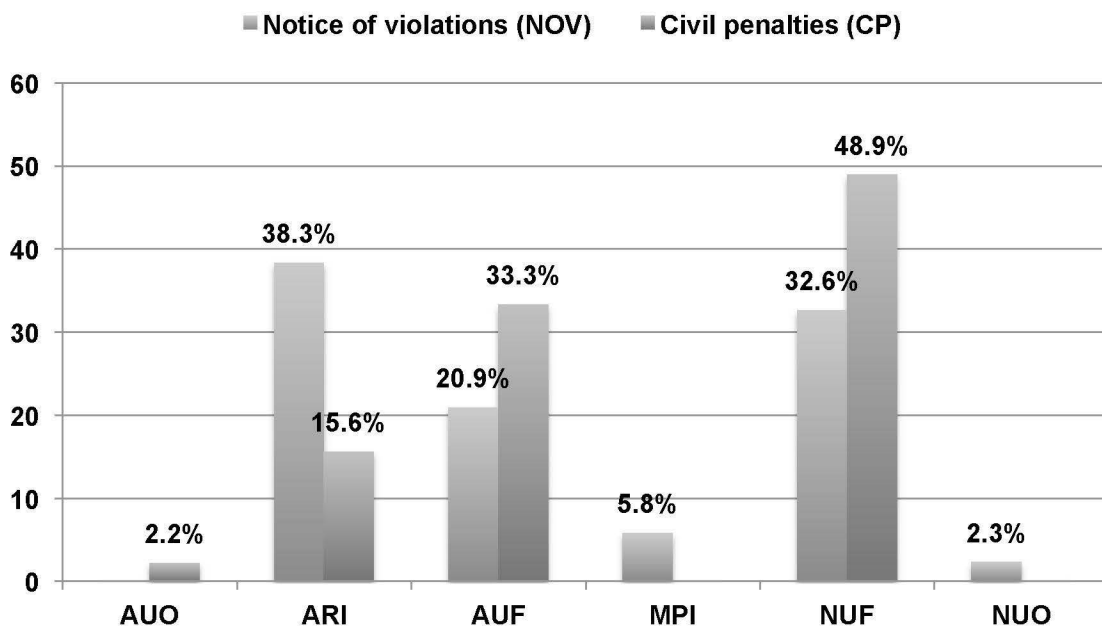


Fig. 5 Case type and percentage of associated enforcement action/s

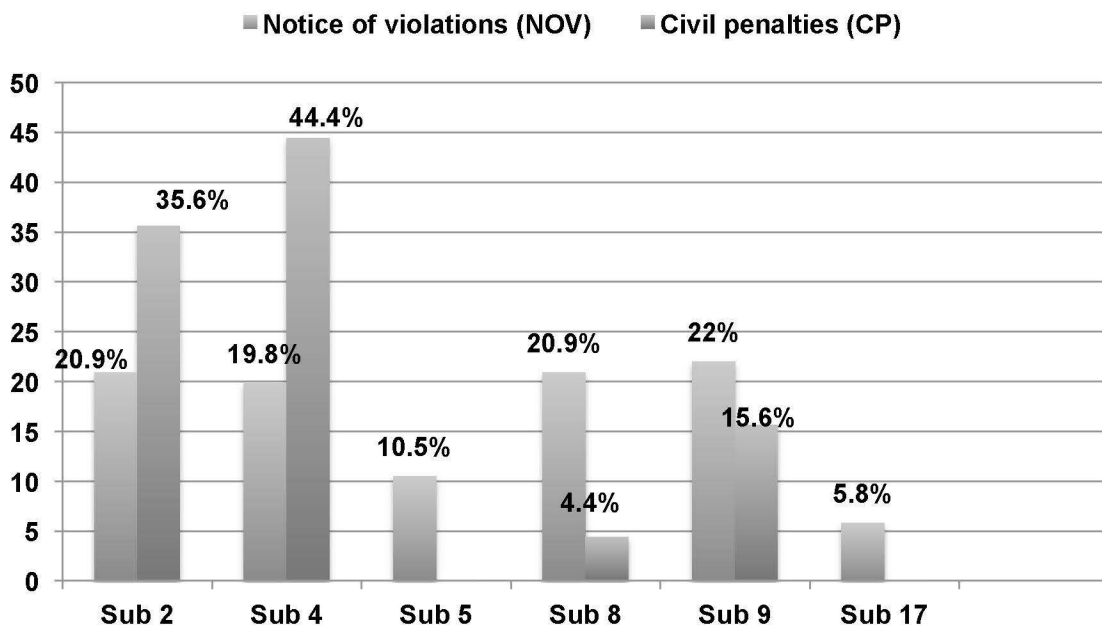


Fig. 6 Percentage of enforcement action/s by violation type (please see next page for description of each violation type)

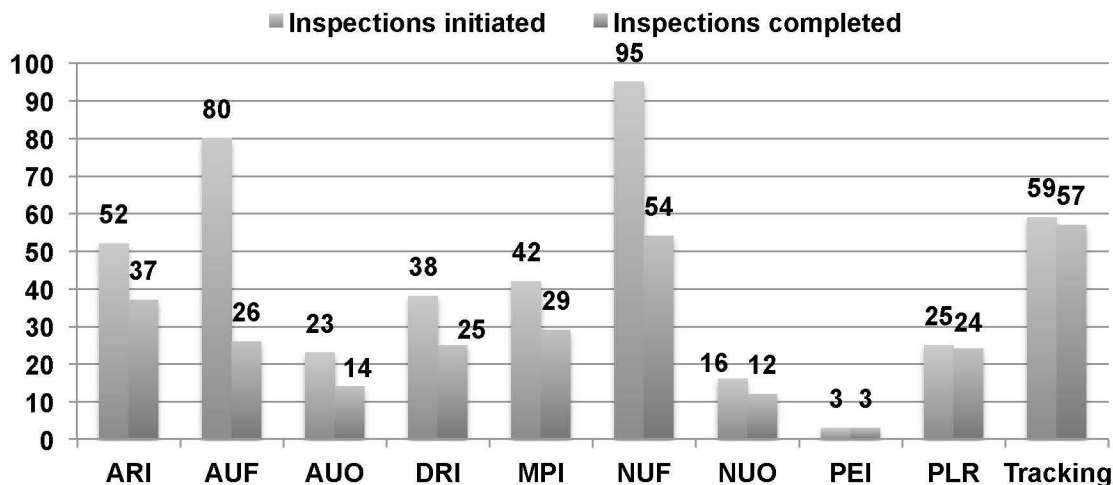


Fig. 7 Inspections initiated vs. inspections completed in FY2014

Violations referred to in Fig. 6 – A person may not...

(2) As a pesticide applicator or operator, intentionally or willfully apply or use a worthless pesticide or any pesticide inconsistent with it's labeling, or as a pesticide consultant or dealer, recommend or distribute such pesticides.

(3) Operate a faulty or unsafe pesticide spray apparatus, aircraft or other application device or equipment.

(4) Perform pesticide application activities in a faulty, careless or negligent manner.

(5) Refuse or neglect to prepare and maintain records required to be kept by the provisions of this chapter.

(8) As a pesticide applicator, work or en- gage in the application of any classes of pesticides without first obtaining and maintaining a pesticide applicator's license, or apply pesticides that are not specifically authorized by such license.

(9) As a pesticide operator, engage in the business of, or represent or advertise as being in the business of, applying pesticides upon the land or property of another, with- out first obtaining and maintaining a pesticide operator's license. The operator also may not engage in a class of pesticide application business that is not specifically authorized by license issued by the State Department of Agriculture. The operator also may not employ or use any person to apply or spray pesticides who is not a licensed pesticide applicator or pesticide trainee.

(13) Apply any pesticide classified as a restricted-use or highly toxic pesticide to agricultural, horticultural or forest crops on land owned or leased by the person without first obtaining and maintaining a private applicator certificate.

(17) Formulate, deliver, distribute, sell or offer for sale any pesticide that has not been registered as required by ORS 634.016.

(19) Distribute, sell or offer for sale any pesticide except in the manufacturer's original unbroken package.

Appendix D

United States
Environmental Protection Agency
Washington, DC 20460

Pesticide Worker Protection Standard Inspection and Enforcement Accomplishment Report

State Oregon (OR-OSHA)	Fiscal Year 2014	Reporting Period October 1, 2013 – September 30, 2014	<input type="checkbox"/> Total Program Accomplishment					
Enforcement Accomplishments This Reporting Year	WPS Tier I Inspection		WPS Tier II Inspection		Total Inspections	*Inspections at Facilities Claiming Family Exemption	Violations during WPS Inspections	
	Use	For Cause	Use	For Cause			WPS Violation Categories	Number of Violations
Total Inspections Conducted	35	18	7	1	61			
WPS Enforcement Actions								
Civil Complaints Issued	9	6	0	0	15			1. Pesticide Safety Training 26
Criminal Complaints Referred	-	-	-	-	-			2. Central Posting 52
Administrative Hearings Conducted	-	-	-	-	-			3. Notice of Application 2
License/Certification Suspension	-	-	-	-	-			4. Entry Restrictions 0
Number of Warnings Issued	-	-	-	-	-			5. Personal Protective Equipment 19
Stop-Sale, Use and Removal Order (SSURO)	-	-	-	-	-			6. Mix/Loading, Application Equip & Applications 1
Cases Forwarded to EPA for Action	0	0			0			7. Decontamination 24
Other Enforcement Actions (e.g. Advisory Letters)	24	4	1		29			8. Emergency Assistance 0
Cases with \$0 penalty WPS violations								9. Information Exchange 0
Number of Cases Assessed Fines	9	6			15			10. Retaliation 0

WPS EPA Form 5700-33H

* This Column is a subset of the WPS Tier I and WPS Tier II Columns to collect data on inspections conducted at facilities claiming family exemption.

Appendix E

OREGON OSHA PESTICIDE EMPHASIS PROGRAM ANNUAL REPORT Federal Fiscal Year 2014

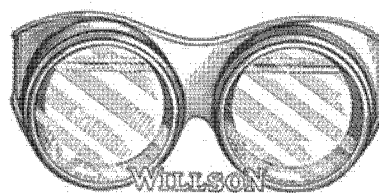
Willson Dust and Spray Masks



Made of a fine grade of gray rubber. For protecting mouth, nose, throat and lungs from dust and flying particles. Self-adjusting to the face and fits comfortably. All parts easily replaced. Long fiber cotton filters. One in box, with 12 filters, weight 4½ ozs.

No. 2.	Cloth Filter Type, with 12 Filters..	Each	3.00
No. 2F.	Extra Filters	per 100	1.50
No. 3.	Sponge Type	Each	3.60
No. 3S.	Extra Sponges	Each	.30

Willson Rubber Goggles



Airtight rubber mask goggles for protecting the eyes against acids, chemicals, spray compounds and dust. Can be worn with Willson spray mask. Unhardened rubber

frame, glass lenses, replaceable. Packed 12 in a carton. No. X63. Wt. per doz., 1¾ lbs....per Doz. Pair 13.68

Photo: www.pesticidepics.org

Garnet R Cooke, Pesticide Coordinator
Chris Ottoson, CIH, Statewide Health Enforcement Manager



Introduction:

Oregon OSHA and the United States Environmental Protection Agency (EPA), Region 10 Pesticides and Toxics Unit, collaborate on pesticide safety issues. Oregon OSHA enforces the Worker Protection Standard, which is supplemented with a pesticide emphasis program. This report is the annual review of the pesticide emphasis program for federal fiscal year 2014 (FY2014). The data elements and analysis are presented, along with recommendations for program improvements for the coming year.

Data Elements:

The data elements examined in this report are based on Oregon OSHA’s Program Directive A-235, entitled “Local Emphasis Program for Pesticides.” Inspections were completed from a programmed list selected from these North American Industrial Classification System (NAICS) codes which will be referred to as “selected NAICSs” for the purposes of this report.

- NAICS 111998 General farming, field Crops, except Cash Grains, Not Elsewhere Classified
- NAICS 111339 Deciduous Tree Fruits
- NAICS 111421 Nurseries & Tree Production
- NAICS 111422 Floriculture Production
- NAICS 115112 Crop preparation including pesticide spraying

NAICS were selected based on the amount and toxicity of pesticides in use, frequency of pesticide applications, the diversity of crops, and the number of workers employed, and work practices in use. Other NAICSs inspected as a result of complaints, referrals or programmed Agricultural Health inspections are included in this report if the inspection addressed pesticide-related issues.

Data Summary:

Pesticide exposures occur throughout the handling process, from purchase to disposal. The goal of the Pesticide Emphasis Program is to reduce occupational exposures to pesticides in agriculture through enforcing the pesticide-related standards such as the Worker Protection Standard, Hazard Communication, Respiratory Protection, Pesticide Storage, Fumigation, and supervision. Implementation of these requirements can reduce the likelihood of exposures resulting in acute or chronic effects. The Pesticide Emphasis Program continues to be an effective tool for disseminating information, education, compliance assistance and enforcement activities to reduce occupational exposures to pesticides in the agriculture industry.

The following is a brief summary of the findings resulting from the evaluation of FY2014 activity. Please see each section for tables and explanations of each.

- ◆ **Inspection Activity.....page 3**
- ◆ **Violation characteristicspage 5**
- ◆ **Pesticide Analytical Response Center (PARC) Cases.....page 6**
- ◆ **External Training.....page 9**
- ◆ **Conclusions.....page 11**
- ◆ **Accomplishments.....page 11**
- ◆ **Goals for the coming year.....page 11**

- ♦ **Inspection Activity:** In FY2014, 75 inspections were completed, with 55 inspections resulting in citations, and covering 2682 workers. Citations were issued in 73% of the inspections completed. The Worker Protection Standard (WPS) was applicable in 61 inspections, indicated by Tier 1 and Tier 2 in the table below. WPS Tier 1 inspections accounted for 71% (53/75) of the pesticide emphasis inspections, and 11% (8/75) were Tier 2. For all WPS inspections, 87% (53/61) were classified as Tier 1. Inspections where pesticides have been used within the preceding 30 days plus the restricted entry interval are classified as Tier 1; inspections where pesticides have not been used within the preceding 30 days plus the restricted entry interval are classified as Tier 2.

In the selected NAICS, 51 inspections were completed, and citations were issued in 39 cases, with 80% (41/51) classified as WPS Tier 1 inspections. Of the 75 pesticide emphasis inspections, 19% (14/75) fell outside the scope of the Worker Protection Standard.

Statistics for Completed Inspections by Industry (NAICS), FY2014

Industry (NAICS)		Completed inspections	Citation issued	In compliance	Percent with citation issued	Percent in compliance	WPS Tier 1*	WPS Tier 2*	Pesticide Emphasis, Non-WPS	Employees covered
Selected NAICS	111339	17	12	5	71%	29%	14	1	2	1305
	111421	19	15	4	79%	21%	17	1	1	722
	111422	1	1		100%	0	1			3
	111998	12	10	2	83%	17%	8	3	1	85
	115112	2	1	1	50%	50%	1	1		8
	111219	2	1	1	50%	50%	1	1		13
	111331	3	2	1	66%	34%	2	1		103
	111332	3	3		100%	0	3			26
	111334	5	2	3	40%	60%	4		1	199
	115114	1		1	0	100%			1	2
	115115	3	2	1	0	100%	2		1	84
	238170	1	1		100%	0			1	5
	311421	1	1		100%	0			1	8
	444130	1	1		100%	0			1	4
	444220	1		1	0	100%			1	41
	561422	1	1		100%	0			1	60
	561730	1	1		100%	0			1	2
	624190	1	1		100%	0			1	20
Total		75	55	20	73%	27%	53	8	14	2682

*Inspections where pesticides have been used within the preceding 30 days plus the restricted entry interval are classified as Tier 1.

*Inspections where pesticides have not been used within the preceding 30 days plus the restricted entry interval are classified as Tier 2.

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

Based on the types of inspections listed below, 44 were programmed planned and 36 of these were completed in the selected NAICS. There were 17 complaint inspections with 41% (7/17) receiving citations; of these 71% (5/7) had serious violations. 51% of the complaints were unsubstantiated. There were 10 referrals with 90% (9/10) receiving citations; of these 78% (7/9) had serious violations.

Attempted and completed inspections by inspection type and industry (NAICS), FY2014

	Total	Selected NAICS					Other NAICS
		111339	111421	111422	111998	115112	
Total completed inspections	75	17	19	1	12	2	24
Complaint	17	4	3	1	3	-	6
Referral	10	-	-	-	1	1	8
Follow-up	1	-	-	-	-	1	-
Programmed Planned	44	13	15	-	8	-	8
Programmed Related	1	-	-	-	-	-	1
Un-programmed Related	2	-	1	-	-	-	1
Attempted (triple zero)	21	1	2	1	2	1	14

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

♦ Violation characteristics:

The following table highlights the distribution of violations. In FY2014, there were 246 pesticide related violations cited with penalties totaling \$5880. In the selected NAICS, 171 violations were cited with penalties totaling \$3310. WPS violations accounted for 55% (94/171) of those violations with penalties totaling \$2020. Pesticide-related violations accounted for 77 violations with penalties totaling \$1290. Other pesticide-related violations include the Oregon OSHA standards addressing hazard communication, respiratory protection, personal protective equipment, emergency eyewash, supervision, pesticide storage, fumigation, and work-site inspections.

Pesticide Violations and Penalties in FY2014 Totals

Industry (NAICS)		Total Pesticide Related Violations	WPS Violations				Other Pesticide Related Violations			
			Serious	Other than serious	Repeat	Total penalties	Serious	Other than serious	Repeat	Total penalties
Selected NAICS	111339	49	-	25	-	-	3	21	-	\$480
	111421	68	10	28	-	\$1090	4	26	-	\$310
	111422	4	-	4	-	-	-	-	-	-
	111998	49	15	12	-	\$930	6	16	-	\$400
	115112	1	-	-	-	-	1	-	-	\$100
Totals		171	25	69	-	\$2020	14	63	-	\$1290
	111219	11	5	1	-	\$500	3	2	-	\$300
	111331	22	-	9	-	-	2	11	-	\$210
	111332	9	1	5	-	\$100	1	2	-	-
	111334	16	1	7	-	\$300	3	5	-	\$100
	115115	2	-	1	1	\$200	-	-	-	-
	238170	1	-	-	-	-	1	-	-	\$100
	311421	4	-	-	-	-	1	3	-	\$210
	441130	-	-	-	-	-	-	-	-	-
	561422	1	-	-	-	-	1	-	-	\$300
	561730	8	-	-	-	-	-	8	-	-
	624190	1	-	-	-	-	1	-	-	\$250
Totals		75	7	23	1	\$1100	13	31	-	\$1470
Grand Total		246	32	92	1	\$3120	27	94	-	\$2760

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

If a WPS violation is grouped with another violation, the WPS and non-WPS violations are counted separately, but the penalty amount for the whole group is retained with the WPS violation.

The violations below are divided up into either handler or worker related, showing the categories of issues for each group. The most frequently violated standards were for personal protective equipment (PPE-Respirators and PPE-Other). Of PPE violations, failure to adequately clean PPE was cited the most often. In FY 2013, there were multiple complaints at facilities using Thiram, and in FY 2014 there were zero.

Pesticide Violations Cited in FY2014

Violation type		Violations
Handler related	PPE Respirators	34
	PPE- Other	27
	Hazard communication	34
	Pesticide storage	17
	Central posting	24
	Training	16
	Decontamination	19
	Safe Equipment Operation	1
	Emergency eyewash	7
	Fumigants	1
Worker related	Central posting	28
	Training	16
	Safe Practices brochure	9
	Notification to workers	2
	Health haz control measures	2
	Decontamination	5
Other	Other (Supervision/Inspections)	4
	Non-pesticide related	31

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

- ♦ **Pesticide Analytical Response Center (PARC) Cases:** The number of PARC cases in FY2014 dropped again from FY 2013. Two-thirds of the PARC cases involved multiple exposures at each site. Contributing factors observed with exposure cases included issues with the pesticide label – either failure to follow, or the lack of clear label directions, which occurred in half of the cases, and, scheduling pesticide treatments when employees were or would be present and failing to communicate to all employees that a pesticide application would be taking place. This remains an on-going problem.

PARC Cases with Oregon OSHA Involvement in FY2014									
Source	Exposure Type	Product	Signal Word	# Exp	Type of Establishment	WPS Applies	Citation Issued	Primary cause	Medical Treatment sought
R	Applicator	Copper Green Wood Preservative	Warning	1	Siding contractor		✓	Label language issue	Yes
R	Bystanders	IVR-SAN 15 & Activator H	Danger	3-4	Juice Company		✓	Accidental increase in concentration	Yes
R*	Applicators	Intensity	Warning	3	Hazelnut Farm	✓	✓	Multiple issues	No
R (OERS)	Bystanders	Unknown	Unknown	4	Farm supply store		✓	Fire department responded, store evacuated—cause undetermined	No
C*	Bystanders	Suspend SC	Caution	3	Call center		✓	Use inappropriate with label/failure to notify	Yes
C*	Bystanders	Hot Shot Fogger	Caution	1	Medical office		✓	Use inappropriate with label/failure to notify	Yes

Source: C = Complaint filed with Oregon OSHA; R = Referral from PARC; OERS = Oregon Emergency Response System; # exp = the number exposed; * indicates narrative to follow.

♦ Three PARC Cases Highlighted

The following narratives (referenced in the previous table with an asterisk) provide a synopsis for three cases.

Complaint – Pesticide Application at a Call Center:

A substitute commercial applicator arrived at a Call Center and asked the contact person if they wanted the “normal” service, and was told yes. The applicator then made an interior application using Suspend SC (EPA Registration # 432-763) while staff were present, and continued to completion despite employees becoming symptomatic and raising concerns. The label for the product clearly states: “Do Not Apply when people are present.” A “normal” service for the Call Center is an exterior application only. Three employees experienced symptoms including reddening of skin, shortness of breath and coughing. Staff obtained information on the product being applied through confrontations with the applicator, not the employer. The employer was cited for multiple serious violations. A referral was made to the Department of Agriculture.

Complaint – Pesticide Application in a Medical Clinic:

For the third year in a row, a pesticide application at a medical clinic produced adverse impacts on employees. A mental health facility which served as the office location of 20 case managers reportedly had an issue with spiders. Some employees sought permission from management, which was granted, to apply store bought foggers over the Labor Day Weekend. Only some employees were informed through word of mouth. Following the application, some employees still entered the building unaware of the activity. Upon returning to work the following Tuesday, the cans were still out and clustered inappropriately close together. An employee suffered an allergic reaction requiring the administration of an Epi-pin. The employer’s investigation revealed that ventilation in the form of opening windows and doors did not occur. These two items were clearly noted on the product label. The employer was cited for serious violations for failure to follow the label and to provide notification to employees. A referral was made to the Department of Agriculture.

Referral: Pesticide exposure at a Hazelnut Orchard:

Three employees were exposed to pesticides through the use of leaky backpack sprayers. This was further compounded by the lack of personal protective equipment (PPE), insufficient training and lack of decontamination supplies. In addition, insufficient supervision led to the employees accidentally obtaining a more hazardous herbicide – Intensity- than what they had been using. Intensity required more PPE. Symptoms experienced included nausea, vomiting, headaches and upper respiratory system pain. The employer was cited for numerous serious violations.

◆ External Training:

External training consists of two parts, workshops put on by the Oregon OSHA Public Education Section, and speaking requests performed in conjunction with Oregon Department of Agriculture events. Speaking requests were conducted mostly in conjunction with day long multi-program agendas put on by grower groups, the Oregon Department of Agriculture, or the Oregon State University Extension Service for the purpose of maintaining credits for pesticide licensees.

Pesticide Related Interventions – External Training, FY2014

Classes	Source*	Attendees
Hazard Communication – Aligned with GHS (HazCom)	Workshop & Internet	859
Personal Protective Equipment (PPE)	Internet only	668
Worker Protection Standard (WPS)	Workshop only	81
		1,608

*Oregon OSHA Public Education opportunities can be found on the Education tab at <http://www.oroSHA.org>

**Source: Information Management Division,
Oregon Department of Consumer and Business Services, December 2014**

Oregon OSHA speaking requests in FY2014

Date	Topic	Attendees
10/10/2013	Pesticide Safety Gone Awry	45
10/30/2013	Hazard Communication? Aligned with GHS	25
11/6/2013	Pesticide Safety Hazard Analysis	92
11/7/2013	Pesticide Safety: Hazard Detection	248
12/6/2013	Respiratory Protection for Ag Operations	30
12/6/2013	Pesticide Safety Gone Awry	30
1/7/2014	Hazard Communication/ Aligned with GHS	240
1/22/2014	What to Expect in an Oregon OSHA Pesticide Inspection	40
1/28/2014	Pesticide Safety Series	108
1/31/2014	(M)SDS and Upcoming Changes	130
2/5/2014	The new GHS	106
2/10/2014	Core Pesticide Training	120
2/25/2014	Worker Protection Standard/GHS for forestry	66
2/26/2014	Ag Health & Safety	22
2/26/2014	Pesticide Emphasis Program	5
3/7/2014	Worker Protection Standard	200
4/8/2014	Worker Protection Standard	10
4/9/2014	Worker Protection Standard	11
4/10/2014	Hazard Communication: Pesticide Recertification	110
4/18/2014	Pesticide Emphasis Program and Vineyards	20
		1,658

Public Outreach: Oregon OSHA tracks publication circulation and video requests. The next few tables show activity for FY2014.

Oregon OSHA Publications in FY2014

Titles	Number Distributed
Pesticide Use and Your PPE	93
Safe Practices When Working Around Agricultural Chemicals (English/Spanish)	6974
Air You Breathe: Oregon OSHA's Respiratory Protection Guide for Agricultural Employers	53
Pesticide Worker Protection Standard reference guide	682
Agricultural Activities AO 3-2014	23
Ag Labor Housing AO 1-2009	25

Oregon OSHA Resource Center Pesticide-related Videos, FY2014

#	Name	English	Spanish	Requests
72	BREATHE EASY - RESPIRATOR SAFETY (E/S)	X	X	7
446/447	BREATHE EASY: A RESPIRATORY PROTECTION PROGRAM	X	X	3
66/67	HAZARD COMMUNICATION - AGRICULTURE SERIES	X	X	3
352	HOW TO CONDUCT WORKER PROTECTION TRAINING/TRAIN THE TRAINER	X		3
475	OREGON GUIA PARA LA SEGURIDAD DE PESTICIDAS (FLIP CHART)		X	1
171	PESTICIDE HANDLERS AND THE WORKER PROTECTION STANDARD		X	1
151	PESTICIDE PROTECTION TRAINING FOR AGRICULTURAL WORKERS (E/S)	X	X	5
95	PESTICIDE SAFETY WORKER PROTECTION (1987. REV 1997)	X	X	1
608	PESTICIDE SAFETY: HELP WORKERS PROTECT THEMSELVES (SPANISH)		X	1
1051	PROTECTING YOURSELF FROM PESTICIDE HAZARDS IN THE WORKPLACE	X	X	1
327	SHEDDING SOME LIGHT ON PESTICIDE PROTECTION (S/E)	X	X	1
169	WORKING SAFELY IN THE GREENHOUSE	X		1
				28

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

◆ Oregon Pesticide Symposium—Multi-Agency Annual Meeting:

The annual Oregon Pesticide Symposium was held in April 2014, with representatives attending from these agencies: Oregon OSHA, Oregon Department of Agriculture, Oregon Department of Forestry, Oregon Department of Environmental Quality, Oregon Health Authority, Oregon Department of Transportation, Oregon State Fire Marshal, Oregon Institute of Occupational Health Sciences (formerly known as CROET), the National Pesticide Information Center, Oregon State University and the EPA Region 10.

◆ Conclusions:

The working relationships between Oregon OSHA and the EPA Pesticides Unit (Region 10) remain positive and productive. Both agencies have collaborated on EPA proposed rulemaking for the Worker Protection Standard. The EPA continually relies on Oregon OSHA's experiences in responding to comments they received on their proposal. The Oregon Pesticide symposium provides opportunities for agencies to collaborate and coordinate around pesticide safety and worker protection issues. The number of agencies present and people in attendance has grown. PARC remains a vital connection for communicating and coordinating agency actions related to pesticide exposure incidents.

◆ Accomplishments:

- ◆ Oregon OSHA partnered with NIOSH/NPPTL, EPA Region 10, and EPA Headquarters to change the EPA's Label Review Manual to remove outdated and incorrect respirator label language. This will ensure, henceforth, that all pesticide manufacturers applying for re-registration or registration of their pesticide products will have the correct respiratory protection language on their labels. This correction will have national impact.
- ◆ Two Hazard Alerts were developed for employers who use aluminum phosphide products to assist them in their development of fumigation management plans. One is for structural use (http://www.orosha.org/pdf/pubs/fact_sheets/fs55.pdf) and the other is for burrowing rodents (http://www.orosha.org/pdf/pubs/fact_sheets/fs54.pdf).
- ◆ Work began on a Questions and Answers Guide for Soil Fumigants in partnership with the Oregon Department of Agriculture.
- ◆ Expanded the Oregon Pesticide Symposium to include staff from all Oregon pesticide agencies that either enforce pesticide regulations or provide support for investigations for better information exchange and to improve communication.
- ◆ Worked extensively within the PARC Board to revise Oregon OSHA's Standard Operating Procedures (SOPs) for communicating and collaborating with PARC member agencies and assisted in the development of other agencies SOP's as directed by the Governor's office and the Oregon State Legislature.
- ◆ Updated the Oregon OSHA Pesticide Use and Your PPE brochure to reflect the correction in the respirator language.

◆ Goals for the coming year:

- ◆ Finalize the Questions and Answers Guide for Soil Fumigants in partnership with the Oregon Department of Agriculture.
- ◆ Expand the Oregon Pesticide Symposium to include all Oregon pesticide agencies that either conduct investigations or conduct activities in support of an investigation based upon each agency's regulatory authority. For the next Symposium, participants will review pesticide cases to better understand each agency's roles and responsibilities.
- ◆ Provide technical assistance in partnership with EPA Region 10, the Oregon Department of Agriculture, Oregon Department of Forestry and Slipstream Media to develop the first Worker Protection Standard pesticide safety training video for Forestry.
- ◆ Develop a Frequently Asked Questions section on Oregon OSHA's Pesticide Page to address questions concerning pesticide exposure.
- ◆ Continue to work with EPA Headquarters to correct respirator language on pesticide labels on currently registered products to allow pesticide users the ability to select appropriate respirators.

Appendix F

**CONSOLIDATED PESTICIDE COOPERATIVE AGREEMENT BETWEEN
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AND
OREGON DEPARTMENT OF AGRICULTURE
FOR FY2014**

**END-OF-YEAR REPORT
FOR
CERTIFICATION AND TRAINING PROGRAM COMPONENT**

This end-of-year report describes activities conducted for the work plan of the Certification and Training program component of the Consolidated Pesticide Cooperative Agreement between the United States Environmental Protection Agency (EPA) and the Oregon Department of Agriculture (ODA) for the period extending from July 1, 2013 through June 30, 2014.

The EPA “Logic Model” approach to assessment of goals and outcomes for program activities is addressed annually in the EPA Cooperative Agreement. The certification and training work plan requirements of the FY2014 cooperative agreement are demonstrated below through program accomplishments. These accomplishments will hopefully provide adequate information to meet the “outputs & measures” listed in the logic model contained in the Cooperative Agreement Work Plan for FY2014.

FY2014 Certification and Training Work Plan Requirements

Program Maintenance and Support

- *Continue to Update Pesticide Certification Examinations and Processes.*
 - ODA administers the pesticide certification examination process throughout the state in order to ensure a base level of competency of certified applicators and to meet federal requirements for pesticide certification. Certification is required prior to licensing as a pesticide applicator, pesticide consultant, private pesticide applicator, directly supervised trainee, in pesticide specific use categories associated with applicator licenses. Certification is contingent upon taking, and passing, written examinations. Oregon has 22 distinct category exams and one core Laws and Safety (which also satisfies the requirements for the Apprentice license). Updates of pesticide certification examinations and processes include:
 - Metro Institute implements computer based testing (CBT) in Oregon for all pesticide certification exams and one core Laws and Safety eighteen of the nineteen testing centers have been converted to CBT.

- There are a total of nineteen testing centers in Oregon, and two testing centers scheduled to be added in the near future.
 - Core Laws and Safety examination has been updated and released for use in all testing centers, in both English and Spanish.
 - Agriculture: Insecticide/Fungicide examination has been updated and will be available for release to all testing centers in early FY2015.
- *Number of testing centers audited for certification examination security & integrity.*
- The State of Oregon contracts with a total of nineteen community colleges or university facilities as testing centers for administering pesticide certification examinations. 4 of the 19 testing centers were audited by ODA Certification & Training staff during FY2014. These audits are conducted to ensure all security agreements were current, all pesticide examinations were accounted for and in good condition, and to provide proctor training for consistent and accurate testing procedures.
 - Auditing testing centers for exam security and integrity is anticipated to be less of a burden in FY 2015 with only two testing centers regularly administering hard-copy exams. It is a goal to eliminate hard copy exams except for special sessions, to accommodate people with learning disabilities, and test takers who need extra time due to language barrier issues.

Pesticide Certification Examination Study Materials Development and Incorporation into ODA website.

- *Coordinated with training providers to assure applicator training materials and programs are consistent with the certification exams?*
- Oregon does not require pre-license training, however, pre-licensing training is available through independent providers throughout the state. ODA works with these trainers to provide guidance and resources to ensure educational information is consistent with ODA certification exams. When examinations are revised, pre-license educators are notified as possible.
 - Special efforts were made in FY 2014 to provide materials for pre-license training of Private Applicators in Spanish and for the new Apprentice License. There are limited instructors for Spanish pre-license courses and ODA provided the study materials in Spanish that we had access to, to ensure current information was being taught.
 - The IPM in Schools law went into effect near the end of FY2012. This law required a new audience of exam takers who are not familiar with pesticide regulations. Additional efforts were made to coordinate and communicate with OSU and independent consultants around the state who provided pre-license training to these potential licensees.

- *Additional pesticide education website resources*
 - The ODA Pesticides Program website added links to resources for:
 - OSU Integrated Pest Management educational resources including:
 - Integrated Plant Protection Center at Oregon State University
 - OSU Pesticide Safety Education Program
 - IPM in Schools as incorporated into ORS Chapter 634.
 - EPA Soil Fumigation Toolbox
 - Direct link to the Acheiva Soil Fumigant Applicator training
 - Water Quality resources including the Oregon NPDES permit and information on the no-spray buffer zones.
 - Links to educational resources about pesticide drift and drift reduction technologies.
 - Links to educational resources regarding pollinator protection and health.
 - New or revised ODA brochures and publications including:
 - Private pesticide applicator responsibilities
 - Pesticide Investigation and Enforcement
 - Public and Commercial applicator responsibilities
 - Apprentice responsibilities
 - Commercial Operator responsibilities
 - Pesticide Dealer responsibilities
 - Pesticide Licensing Guide for Oregon
 - Protecting Pollinators from Pesticides
 - Alternatives to neonicotinoid insecticides for use in nurseries
 - Alternatives to neonicotinoid insecticides for use on landscape ornamentals
 - Bumble bee, trees and neonicotinoids (a brochure)
 - Developed and Advisory warning about herbicide exposure and grapes in May 2014.

Certification and Training State Plan Requirements & Reporting Database

- *Certification & Training report as required under 40CFR Part 171 (Section 171.7(d)).*
 - The FY2014 C & T report that is required to be entered into the electronic C & T State Plan and Reporting Database (CPARD) will be completed by October 31, 2014. The information entered into CPARD is collected and reported based on the federal fiscal year (October 1 – September 30).

Training: Monitoring and Quality Assurance

- *Training sessions evaluated to ensure that they are of adequate quality and are addressing priority focus areas.*

- A total of 1096 continuing education courses were accredited by ODA for recertification purposes in FY2014. The trend over the last 3 years shows the number of courses leveling off after a few years of significant increases. Enhancement of the recertification program is based on the premise of constantly and consistently providing, and improving recertification training and processes. The primary method of evaluating recertification courses is through intense review and scrutiny of programs upon application for recertification accreditation. The people responsible for approving, or denying, recertification credits are experienced in pesticide training and investigations. The broad-based experience of C & T staff provides a thorough and competent, in-depth evaluation of course agendas to ensure quality agendas are accredited. The course topics, presenters, length of presentations, and overall appropriateness of the subjects are taken into consideration prior to accreditation approval.
- The efforts to improve and ensure applicator competency continued through FY2014 and will continue with workgroups and discussions including OSU and other interested parties.
- ODA contributed with neighboring states on soil fumigation training and revisions to the National Core Manual and learning objectives; NPDES and IPM in Schools outreach, water quality, Pollinator Protection outreach, pesticide drift and drift reduction, and label language interpretation information sessions as specific focus areas that were targeted.
- ODA updates the Recertification Accreditation Guide each year to keep improving the accreditation approval process to reduce the time necessary to review each class and to get sponsors to provide accurate information in the application.

Monitor and/or participate in applicator certification training programs

- *ODA participation in recertification training courses conducted to provide outreach, education, and regulatory updates to licensed applicators.*
 - ODA staff participated as presenters in approximately 113 different training sessions through the entire state. An increase over FY2013, the presentations were of significant topics and primarily focused on label interpretation, drift mitigation and drift reduction technologies, soil fumigation regulations, endangered species protection, pollinator protection, water quality, NPDES pesticides general permit, compliance assistance, violations/enforcement, licensing responsibilities, rodenticides, Indian Country certification and licensing, RUP concerns, and providing technical expertise to pesticide users, dealers, consultants, and others. ODA Pesticides Program employees are routinely requested as presenters at numerous sessions throughout the state every year. Recertification courses are accredited in different mechanisms of delivery including: live

(in person), Spanish language, internet, correspondence, video conference (webinars), and CD classes.

- A brief overview of some of the courses and related sponsors include:
 - ODA staff 113 (presentations and 6 sponsored trainings)
 - OSU-ES 143
 - Spanish courses 40
 - WPS courses 14
- In review of the recertification courses provided to applicators/consultants statewide, it was determined that Oregon State University Extension personnel sponsored 143 sessions of the 1096 FY2014 accredited sessions (13%).
- Auditing of actual training sessions is conducted by certification and training staff, program managers, pesticide investigators, and other Pesticides Program representatives. In FY 2014, approximately 54 of the 1096 individual training sessions were evaluated by ODA staff for quality and content. Efforts will be made during FY2015 to increase the auditing rate to validate the recertification review process to ensure that education provided to certified/licensed applicators is consistent with ODA accreditation standards and guidelines.

Addressing Compliance/Enforcement Issues Through C & T Program

□ *Identified focus areas.*

- In FY 2014, because of high profile enforcement cases and evidence that pesticide users did not fully understand label restrictions nor possibly appreciate the full value of advisory information on pesticide labels, the training topic focus shifted heavily toward Pollinator Protection, label understanding and interpretation, and drift prevention. ODA staff helped educated pesticide users and the public about a Temporary (Emergency) Rule prohibiting the use of dinotefuran on all plants, regardless of application method, in effect from June 27 – December 24, 2013; and also about a Temporary (Emergency) Rule prohibiting the use of dinotefuran and imidacloprid on all linden trees, regardless of application method, in effect from June 26 – December 23, 2014.
- Federal issues such as Endangered Species, soil fumigation label changes, and the NPDES permit developed by the Oregon Department of Environmental Quality (DEQ) were also presented at many of the ODA “update” presentations. Licensing requirements and responsibilities, recordkeeping requirements, special registrations (Section 24c’s and

Section 18's), tolerance information, resistance management were all reinforced as "core" topics.

- Special efforts were additionally made to address pesticides in water with the development of the Water Quality Pesticides Management Team (ODA, Forestry, Fish and Wildlife, Health Authority and DEQ) and having the ability to interpret surface water sample results to use as a training tool. ODA Pesticides Program and the ODA Natural Resource Program are now under the same administrator and thus, there is more crossover between the two Programs especially when it comes to addressing water conditions including sediment, temperature, dissolved oxygen, and even pesticides. Having valuable information to share with pesticide users with regard to the amounts of pesticides and the frequency of certain pesticides being detected in surface waters is a powerful tool to generate interest in implementing agricultural best management practices. During presentations, growers and other pesticide users are shown water quality data in conjunction with pesticide label statements (Surface Water and Ground Water Advisories etc.).
- FIFRA 25(b) products were a focus to some limited audiences, and of interest to medical marijuana growers. Of special interest for some audiences were the non-compliant labels and products which contained ingredients allowed to be used in FIFRA 25(b) products; however, did not have established tolerances.
- In 2013, ODA issued a FIFRA Section 24c registration for the use of zinc phosphide on cabbage leaves to control Belding's Ground Squirrels in alfalfa in four Oregon counties. After interviewing growers who had used the product, ODA partnered with Oregon OSHA to increase respiration and other PPE requirements. ODA is now mandating specific ODA training prior to product use with a specific emphasis on Worker Safety.
- In November 2013, ODA Director Katy Coba wrote a letter to Steven Bradbury, Director, OPP, EPA regarding the need for better pesticide labeling for pollinator protection, and concerns about the translocation and half-life of neonicotinoid insecticides.
- In June 2014, meet with a Bedbug Stakeholders group to discuss concerns about lack of adequate applicator training, and in response they held a comprehensive Bedbug Boot Camp in which an ODA staff person participated.
- In response to a mid-March 2014 Canada Goose kill, ODA developed and mail a Pesticide Advisory regarding the use of zinc phosphide.

Additional activities.

- *Partnering with C & T representatives at the Pesticide Applicator Certification & Training Workshop (PACT)* ○ Laurie Gordon and Linda White, Pesticides Program Certification & Training staff attended the Pesticide Applicator Certification Training Workshop in August 2013. This opportunity is always

beneficial to ODA Pesticide programs in the variety of topics that are presented and in the networking and resources that are made possible.

- Laurie Gordon was a presenter and moderator during the PACT Workshop.

Participation in the 2014 Western Region Pesticide Meeting in Seattle, Washington

- Linda White, Pesticide Program Certification and Training staff attended the meeting in May, 2013.
- Linda White was a moderator during the conference
- Participation in the Certification and Training Assessment Group (CTAG)
 - Laurie Gordon, ODA Certification & Training Specialist serves on the CTAG Board of Directors representing regional issues.
- *Participation in the State FIFRA Issues Research and Evaluation Group (SFIREG)*
 - Steve Riley, ODA Pesticides Water Issues Specialist, was a representative on the SFIREG Environmental Quality Issues Sub-Committee. Steve attended two meetings of the EQI in FY 2014.
 - Rose Kachadoorian is a representative on the SFIREG sub-committee on Program Operations and Management (POM). In FY 2014, Rose attended two POM meetings and was also a presenter. Rose Kachadoorian also attended an AAPCO meeting in March 2014.
- *Participation in PREP Course*
 - Rose Kachadoorian participated in a PREP course in July 2014, “Pesticide Regulatory Education Program: Pesticide Program Management for New Supervisors/Mangers Course”
- *Participation in Oregon Department of Justice Training:*
 - Rose Kachadoorian participated in a training by the Oregon Department of Justice in December 2013, Convening & Facilitating Collaborative Stakeholder Groups Training
- Tribal
 - Development of new version of a Memorandum of Agreement between the Coquille Indian Tribe of Oregon and the Oregon Department of Agriculture that relates to regulation of pesticides for the Coquille Forest. Some signatures were received in FY2014.
 - Rose Kachadoorian on March 20, 2014 present information regarding EPA's Certification Plan for Indian Country to the STATE-TRIBAL NR WORKGROUP.
- School Integrated Pest Management (IPM)
 - In June 2014, Linda White and Rose Kachadoorian met with Oregon State University and members of schools to discuss the concept of a new licensing category, School IPM.
- *Activities associated with Soil Fumigation Label Changes*

- ODA conducted outreach on the new soil fumigant labeling requirements to affected parties. Information was included in some of the annual Regulatory Update presentations given at pesticide license recertification meeting. In addition, ODA staff participated in two large industry stewardship meetings sponsored by soil fumigant registrants. These presentations highlighted the certification, training and other labeling requirements associated with the new risk mitigation measures. The annual license renewal mailing provided an update on the changes, especially in regard to the training and certification requirements of the Phase 2 labels. ODA made frequent references to the EPA fumigant outreach materials found at http://www.epa.gov/oppsrrd1/reregistration/soil_fumigants/.
- ODA Pesticides Program C & T Specialist, Laurie Gordon, attended soil fumigation training opportunities in Washington. EPA was involved with these trainings.
- Pesticides Program investigators have been working closely with growers, custom applicators and agricultural dealers applying soil fumigants.
- *Other activities related to certification and training outreach*
 - Laurie Gordon was part of a committee to revise the learning objectives for the National Core Manual
 - Working to reinstate reciprocal licensing with Idaho – ODA is actively working with the Idaho Department of Agriculture to recognize Idaho's certification and licensing for most license types and categories
 - Participated in phone calls with FEAD and others regarding EPA's Worker Protection Standard (WPS) rule proposals

Appendix G

**CONSOLIDATED PESTICIDE COOPERATIVE AGREEMENT
BETWEEN
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AND
OREGON DEPARTMENT OF AGRICULTURE
FOR FY2014**

**END-OF-YEAR REPORT
FOR
WATER QUALITY PROTECTION PROGRAM COMPONENT**

This end-of-year report describes activities conducted for the work plan of the Water Quality Protection program component of the Consolidated Pesticide Cooperative Agreement between the United States Environmental Protection Agency (EPA) and the Oregon Department of Agriculture (ODA) for the period extending from July 1, 2013 through June 30, 2014.

Continue Coordination with other State and Federal Agencies.

- ODA has a 0.5 FTE technical staff position dedicated to continued development and implementation of Oregon's Pesticide Management Plan (PMP). Further revisions of this document were coordinated with member state agencies of the Water Quality Pesticide Management Team (WQPMT), formed in FY2008. In addition to ODA Pesticide Program, membership of the WQPMT is composed of representatives from the Oregon Department of Environmental Quality (DEQ), ODA Natural Resources Program (non-point source agricultural water quality), Oregon Department of Forestry (ODF), the Oregon Health Authority (OHA) and Oregon State University (OSU). The WQPMT operates under a Memorandum of Understanding (MOU) which was approved and signed by each agency director in December, 2009. This team approach is the cornerstone for the development of comprehensive and efficient local solutions to pesticide-related water quality issues.
- Communication is also established with key program contacts from the Geological Survey (USGS), various county Soil and Water Conservation Districts, local watershed councils and other key stakeholders as needed. The collaborative approach to the complex area of pesticide-related water quality issues provides a foundation of cooperation, leveraging of resources and a progression of efforts towards achieving the common goals of evaluating Pesticides of Interest (POIs) and Pesticides of Concern (POCs), knowledge sharing and the implementation of coordinated processes to address pesticide detections in surface and groundwater in Oregon.
- Due to this increased cooperation between state agencies, ODA has become intensively involved in water quality programs administered by DEQ, the State Lead Agency for the Clean Water Act. In June 2013, the Oregon Legislature provided resources to continue the Pesticide Stewardship Partnership Program

(PSP) and expand it into new areas. The allocated resources also included funds for technical assistance in existing PSP area and pesticide waste collection events. The PSP assessment and expansion efforts are administered through the interagency WQPMT.

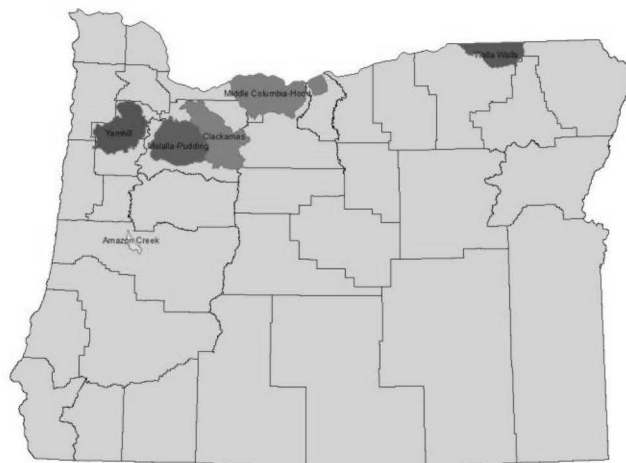
Identify and Evaluate Pesticides of Interest and Concern

- ❑ During FY2014, ODA and the WQPMT used the EPA OPP Aquatic Life Benchmarks to evaluate PSP generated monitoring data for pesticides of interest and pesticides of concern under the PMP when aquatic life Water Quality Standards were not available. Under the PMP, Oregon considers the detected concentration of an active ingredient in water relative to the pesticide's Aquatic Life Benchmark or Water Quality Standard and the frequency of its detection in monitoring programs. In addition, Oregon takes a "weight-of-evidence" approach, considering additional factors such as toxicity, environmental fate, potential sources and use patterns, co-occurrence with other pesticides and possible sub-lethal effects reported in the scientific literature to prioritize the pesticides to be evaluated each fiscal year.
- ❑ In addition, in FY2014 the WQPMT adopted the EPA Human Health Benchmarks for Pesticides (HHBPs) to help assess and prioritize monitoring data for potential effects on human health for pesticides that have no drinking water standards or health advisories.
- ❑ In FY2014, ODA and the WQPMT maintained the list of 72 pesticides (including degradates) plus the "phenoxy herbicide group" for a total of 73 on its master list of pesticides of interest. Out of this list, forty-three (59%) are captured in the analytical methods currently used by DEQ. Analytical capability to detect glyphosate was added in FY2014.
- ❑ Seven (7) pesticides of interest were identified to continue further evaluation during FY2014 (2,4-D, Metsulfuron Methyl, Sulfometuron Methyl, S-Metolachlor, Propiconazole, Chlorothalonil, Pendamethalin). All of these were evaluated as "Not Pesticides of Concern". Glyphosate, Linuron and Bifenthrin have been added to the "further evaluation" list.
- ❑ Pesticides of Concern that continue to be evaluated and/or managed in FY2014 are: Atrazine, Carbaryl, Simazine, Chlorpyrifos, Malathion and Diuron. Based on recent detections in the water column, Bifenthrin has been added as a Pesticide of Concern.
- ❑ In FY2014, continued progress was demonstrated reducing concentrations and the number of detections of the Pesticides of Concern Diuron, Chlorpyrifos and Malathion in the fruit growing areas along the Columbia River that are active Pesticide Stewardship Partnerships (PSPs).

Additional State Activities Involving ODA Pesticides & Water Quality

The WQPMT is involved with the Oregon Pesticide Stewardship Partnerships (PSPs). There are currently eight (8) PSP projects in seven (7) sub-basins throughout the state (Figure 1) that represent different land uses. Four of the PSPs (Hood River, Pudding, Walla Walla and Wasco) represent predominately agricultural pesticide use. Two PSPs (Clackamas and Yamhill) represent a mix of agricultural, forestry and urban/rural residential pesticide use. The Amazon Creek in the Long Tom Watershed, which runs through Eugene, Oregon represents predominantly urban pesticide use. During FY2014, more than 600 surface water samples were collected, analyzed and evaluated for more than 100 pesticide analytes (43 of which are listed as Oregon Pesticides of Interest) at various sites across the 8 PSP project areas. Source identification and mitigation measures were considered at a grass roots level with involvement of OSU-Extension, growers, watershed councils, soil and water conservation districts, ODA and others. The WQPMT is involved in the planning, implementation, and evaluation of the PSPs. The monitoring data in the PSPs is the primary source of monitoring data that are evaluated by the WQPMT.

Figure 1: Map of PSP Projects in Oregon



The Oregon Departments of Agriculture (ODA) and Environmental Quality (DEQ) received funding in the 2013 Legislative Session to support and expand the Pesticide Stewardship Partnerships (PSP) Program. The funds will be dedicated to environmental sampling, sample analysis, and technical and project implementation support. Currently, there are eight (8) PSP projects in seven (7) watersheds with plans to expand into two new watersheds during the 2013-15 biennium. Major objectives of the expansion effort is to place more consideration on (1) land uses beyond agriculture (e.g. urban, rural-residential, Rights-of-Way, forestry) and (2) areas with salmon-bearing streams. Additionally, a portion of the funds are being used to plan, support and implement waste pesticide collection events in selected

watersheds. Seven (7) collection events are planned through the end of the 2013-15 biennium. One collection event was conducted in FY2014. The mechanism for pesticide stewardship activities under the PSP program is established through the Oregon Pesticide Management Plan and administered through the interagency Water Quality Pesticide Management Team (WQPMT). It is anticipated that these funds will continue in the 2015-17 biennium.

Activities conducted by ODA Water Quality program in FY2014:

- Numerous outreach and education presentations regarding the pesticide monitoring data were given to various industry stakeholder groups. During FY2014, ODA alone gave seventeen (17) presentations throughout the state to an average audience size of 10-20 per session. DEQ provide an equal number.
- Discussions continue with USGS regarding the possibility of leveraging monitoring resources/locations with the USGS NAWQA Cycle 3 monitoring program focused on urban pesticide use in Oregon.
- Relevant pesticide monitoring information and descriptions of the PSP efforts have been included in ODA's Natural Resource Program Agricultural Water Quality Area Plans for the Pudding, Clackamas and Yamhill watersheds. Individuals in the Agricultural Water Quality Program have been active in the identification and implementation of the PSP into candidate watersheds.

EPA Reporting Database (POINTS)

- EPA and the states collaborated to design a database reporting system around the Pesticide of Interest/Concern/Management concept. The resulting database is referred to as the Pesticides of Interest Tracking System (POINTS). The POINTS database is used by EPA and the states to evaluate program progress and to compare information between programs. The FY2014 data for this year end report has been entered into the POINTS database and will be finalized by March 31, 2015, as needed to comply with the FY2014 EPA/ODA Consolidated Cooperative Agreement.

- <http://www.wq.wsu.edu/default.aspx>

Year-end data on the 57 compounds designated by EPA as *Pesticides of Interest* and the 16 pesticides added by Oregon has been completed. All 73 compounds (Table 1) have been addressed with the designations as listed below.

- *EPA and Oregon Pesticide of Interests: 57 + 16 = 73*

Measure 1 – FY2014 Pesticides of Interest

Number of pesticides of evaluated vs number of pesticides of interest:

47/73 (64.4%)

Measure 2 - FY2014 Pesticides of Concern Actively Managed

Number of pesticides of concern under active management* vs number of pesticides of concern identified: **5/7 (71%)**

* *Outreach and education on POCs was considered active management during FY2014*

Measure 3 - FY2014 Demonstrated Progress

Number of AIs with demonstrated progress vs number of active ingredients under active management: **5/5 (100%)**

Measure 4 - FY2014 Number of Cumulative Re-evaluations: 52

Measure 5 - FY2014 Number of Pesticides of Concern Re-evaluated Not a Pesticide of Concern: 0

- Pesticides of Interest that ODA committed to evaluate during FY2014: **2**
 - 2,4-D - *still under evaluation*
 - S-Metolochlor - *still under evaluation*
- Additional *Pesticides of Interest* evaluated during FY2014: **5**
 - Metsulfuron Methyl – still under evaluation
 - Sulfometuron methyl - NPOC
 - Malathion - *POC*
 - Pendamethalin - NPOC
 - Bifenthrin - POC
- Pesticides evaluated to be Oregon *Pesticides of Concern*: **7**
 - Atrazine
 - Bifenthrin
 - Carbaryl
 - Chlorpyrifos
 - Diuron
 - Malathion
 - Simazine
- Pesticides under Active Management:
 - Atrazine
 - Carbaryl
 - Chlorpyrifos
 - Diuron
 - Malathion
- Pesticides under Active Management with Demonstrated Progress: **4**
 - Carbaryl
 - Chlorpyrifos
 - Diuron
 - Malathion

Table 1: 73 US-EPA and Oregon “Pesticides of Interest” (FY2014)

2,4-D	Acetachlor	Alachlor	Aldicarb	Atrazine
Azinphosmethyl	Benfluralin	Bentazon	Bifenthrin	Bromacil
Carbaryl	Carbofuran	Chlorothalonil	Chlorpyrifos	Clopyralid
Copper Pesticides	Cyfluthrin	Cypermethrin	Dacthal	DBCP
Deltamethrin	Diazinon	Dicamba	Dicofol	Diuron
Endosulfan	Esfenvalerate	Ethalfuralin	Ethoprop	Fenbutatin oxide
Fipronil	Flumetsulam	Glyphosate	Hexazinone	Imazamethabenz
Imazapyr	Imidacloprid	Isoxaflutole	Lamda cyhalothrin	Lindane
Linuron	Malathion	Mesotrione	Metalaxyl	Metolachlor
Metribuzin	Metsulfuron methyl	MSMA	Myclobutanil	Napropamide
Norflurazon	Oxyflurofen	PCP	Pendimethalin	Permethrin
Phenoxy herbicides	Phosmet	Picloram	Prometon	Prometryn
Propargite	Propiconazole	Simazine	Sulfometuron methyl	Tebuthiuron
Terbacil	Thiamethoxam	Tralkoxydim	Triadimeton	Triallate
Triclopyr	Trifluralin			

Appendix H

**END-OF-YEAR REPORT
CONSOLIDATED PESTICIDE COOPERATIVE AGREEMENT BETWEEN
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AND
OREGON DEPARTMENT OF AGRICULTURE
FOR FY2014**

**END-OF-YEAR REPORT
FOR
ENDANGERED SPECIES PROTECTION PROGRAM COMPONENT**

This end-of-year report describes activities conducted for the work plan of the Endangered Species Protection program component of the Consolidated Pesticide Cooperative Agreement between the United States Environmental Protection Agency (EPA) and the Oregon Department of Agriculture (ODA) for the period extending from July 1, 2013 through June 30, 2014.

Core Activities:

□ ***Improve Interagency Cooperation***

ODA continues to work cooperatively, share information and meet with other agencies that also have endangered species concerns and responsibilities.

- September 2013, ODA worked with the Oregon Department of Fish and Wildlife (ODFW) to review restrictions on the use of a pesticide product near a wildlife refuge with endangered species.
- September-November 2013, ODA worked with the Oregon Department of Fish and Wildlife regarding the death of a Great Horned Owl in the Corvallis area. The owl was exposed to at least two different anti-coagulant rodenticides (brodifacoum and bromadiolone). In other areas of the country, illegally used rodenticides have been reported to negatively impact wildlife, including listed species. To educate pesticide users and the public, ODA developed a newsletter article, and a press release. ODA also included news of this owl's death in presentations.
- April 2014, ODA worked with USFWS and ODFW to mitigate risks to endangered species and migratory birds when developing restrictions for the above-ground zinc phosphide on grass seed Section 24c's.

- December 2013, ODA worked with multiple federal and state agencies in determining how to control Dreissenid (aquatic invasive mussels), and yet mitigate risks to non-target species, including listed species, ODA attended the “Oregon and Washington Dreissenid Rapid Response Working Group” meeting in WA.
- ***Staff Development***
 - No formal trainings or workshops specific to endangered species were attended during the period between July 1, 2013 through June 30, 2014.
- ***Pesticide inspector and pesticide user education of the Endangered Species Protection Program. Outreach to the Regulated Community***
 - A significant focus of the ESPP program in Oregon has been on providing education and outreach activities to pesticide investigators, pesticide users, and pesticide consultants. ODA includes information regarding ESPP to pesticide applicators and consultants as a part of the continuing education required for recertification. There were approximately 12 presentations that specifically included ESPP information.
 - ODA continues to update maps and the ODA website based on the status of in active ingredients. During FY2014, there were county maps on ODA’s website for the following remaining active ingredients: 1,3-D, Bromoxynil, Diflubenzuron, Fenbutatin-oxide, Prometryn, Propargite, and racemic metholachlor. This website will be continued to be updated in FY2015.
 - October 2013, ODA worked with the commodity groups to write an article regarding the Interim Court Ordered Buffers.
 - March 2014, ODA distributed information regarding the “Proposal for Enhancing Stakeholder Input in the Pesticide Registration Review and ESA Consultation Processes and Development of Economically and Technologically Feasible Reasonable and Prudent Alternatives” (Docket Number: EPA-HQ-OPP-2012-0442).
 - In response to a mid-March 2014 Canada Goose kill, ODA developed and mailed a Pesticide Advisory to licensed pesticide applicators regarding the use of zinc phosphide. Users were informed of hazards to endangered species and migratory birds.

- June 2014, ODA distributed information regarding EPA opening the Public Comment Period on Reinstated Buffer Zones for Five Pesticides to Protect Pacific Salmon

- ***Implementation of the EPA Strategy for Protecting Endangered Species in Oregon.***
 - ODA originally anticipated that the National Endangered Species Protection Program Implementation Plan would be finalized, and the “Bulletins Live!” or the “Bulletins Live! Two (BLT)” site would be operational. The Department has not yet begun implementation strategies for the ESPP due to the fact that neither “Bulletins Live” or “Bulletins Live! Two (BLT)” are available. When a system does become available, ODA will lead a coordinated effort among agencies to review the program and begin to develop a strategy for protecting endangered species in Oregon from the potential effects of pesticides when there are bulletins to follow and an accurate and current resource database is accessible by pesticide users.
 - ODA will also begin an extensive grower education program once labels have been appended to reflect changes in buffers, additional restrictions, or the incorporation of pesticide drift-reduction technologies. Currently, the department is educating pesticide applications on the various locations on a pesticide label that a buffer can occur and why a buffer is present on the label.

- ***Establish Endangered Species Information Links to Pesticides Division Web Page.***
 - Oregon has expanded the number of web links that are connected to the Pesticides Division web page. From the ODA Pesticides Division web page, individuals can reach an “Endangered Species” link. This link takes the user to such sites as U.S. Fish and Wildlife Services, the Endangered Species Act, National Oceanic and Atmospheric Administration (NOAA) Fisheries, The Oregon Natural Heritage Program, and the Oregon Department of Fish and Wildlife (list of Oregon threatened and endangered fish and wildlife species). ODA routinely reviews additional links. These links are monitored and updated as appropriate.

- ***Review of Specific Pesticide Uses for Endangered/Threatened Species Protection.***
 - April 2014, worked with EPA’s Environmental Fate and Effects Division, to provide information to USFWS regarding the use of Diatomaceous earth, a pesticide registered in Oregon. USFWS was concerned that it

could negatively affect an endangered butterfly that feeds on lupines near pastures.

- Especially within ODA's special registration program, ODA has been actively consulting with other agencies to determine the possible impacts of specific pesticide uses on threatened and endangered (E/T) species. Prior to issuing a Section 24c registration, ODA reviews whether there are any potential impacts to listed species. EPA is requiring ODA to provide endangered species information for specific areas in Oregon in correlation to Section 18 requests or Section 24C submittals.

Endangered Species Enforcement.

- ***Enforcement***
 - The Department enforces all pesticide product label statements regarding E/T species, and investigates allegations of pesticide misuse that may impact threatened and/or endangered species. The Department continues to cooperate with federal and state agencies investigating possible plant and wildlife incidences by providing information and technical expertise.

Appendix I

Field Program for Endangered Species: Data Collection Sheet for FY2014 EOY Report

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What means have you used (e.g., pesticide safety training, continuing education credits, pesticide applicator training) to inform current or potential pesticide users and inspectors about the ESPP, including Endangered Species Protection Bulletins (Bulletins)?

During FY2014, the Oregon Dept. Of Agriculture (ODA) Pesticides Division provided information regarding the Endangered Species Protection Program (ESPP) to growers, potential pesticide users, commercial pesticide applicators, commodity commissions, grower organizations, Oregon State University (OSU) and other interested parties through a variety of mechanisms. ODA staff conveyed information by phone, email, e-newsletter a press release, and in person. However, most information was disseminated by ODA staff at workshops, field days, and during formal presentations at recertification courses. There were approx. 12 presentations made by ODA staff which heavily focused on ESPP. These events were frequently sponsored by OSU-Extension or Pesticide Dealers.

ESPP and EPA's entire pesticide program have been linked to the ODA website, and prelicense trainers have been notified to include this subject matter to make potential applicators aware of ESPP activities and refer to EPA's website as a resource.

Biological Opinions (BiOps) issued by the National Marine Fisheries Service (NMFS) are of significant interest to the growers and other members of the regulated community. ODA has provided information, and encouraged stakeholders to comment on draft Reasonable and Prudent Measures (RPMs) and Alternatives (RPAs) included in draft Biological Opinions received by EPA.

The ODA website has been periodically updated, including updating of maps, to reflect the current status of the related interim court ordered buffers from the Washington Toxics Coalition vs. the U.S. Environmental Protection Agency (WTC v. EPA) lawsuit.

ODA has communicated very closely with the Oregon Department of Fish & Wildlife and the US Fish and Wildlife Service on issues concerning candidate and listed species when determining additional restrictions and/or precautions that are necessary in the registration of FIFRA Section 24c uses and processing of FIFRA Section 18 emergency exemptions. Of particular focus was a FIFRA Section 24c for the use of zinc phosphide on cabbage leaves to control Beldings Ground Squirrel in alfalfa, that would be used in the same county as a federal wildlife refuge. Possible E/T species are located periodically in the area.

Please provide any additional comments, suggestions or recommendations regarding field implementation of the ESPP.

Many growers would prefer buffer widths to be directly on the label, in a clear, consistent and easy to find location. They want the same language to be used on pesticide labels - not “no spray zone” on one label, and “buffer” on another.

In addition, sometimes application buffers are located in inappropriate locations, such as under mixing/loading. For example, EPA Reg. No. 100-817 (revised August 20, 2014).

Mixing/Loading Instructions

“This product may not be applied aerially or by ground within 66 ft of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft around natural or impounded lakes and reservoirs.”

Growers have also expressed that they do not want to have to go to a computer to calculate a buffer zone (no spray area). It is suggested that the label or bulletin have an easy to use table.